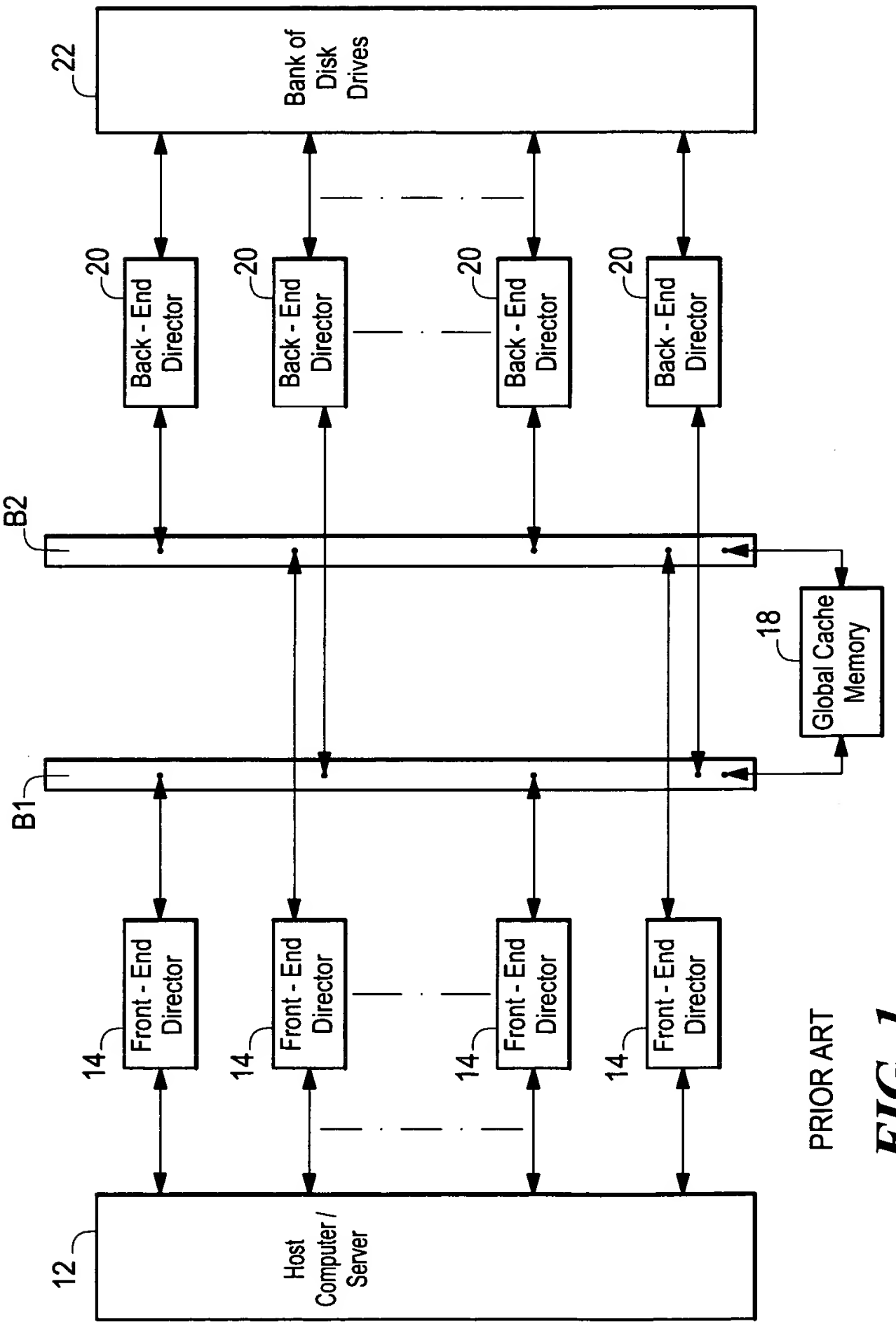
OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE



PRIOR ART

FIG. 1

OIPE JC110
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

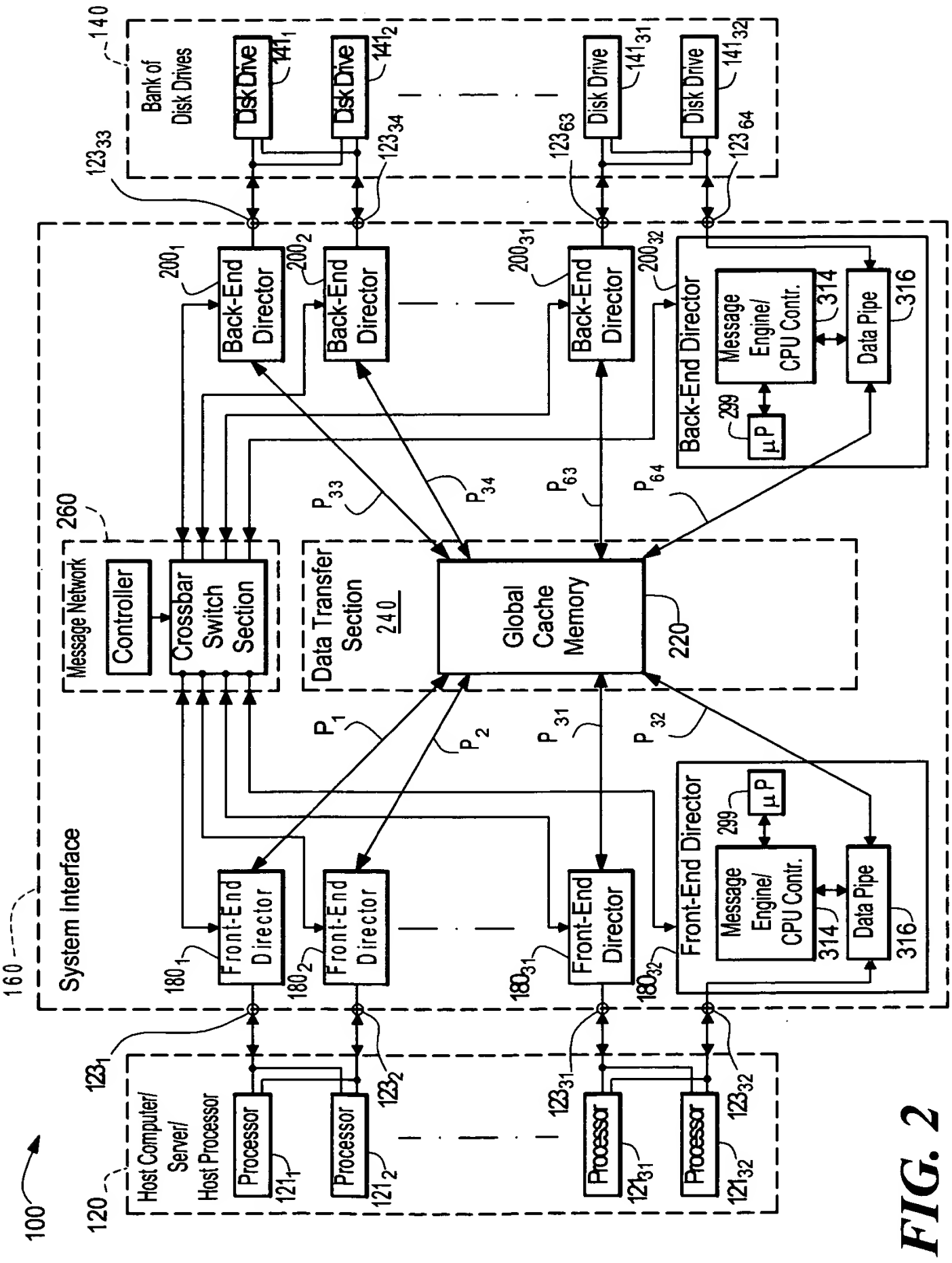


FIG. 2

OIPE JC110
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

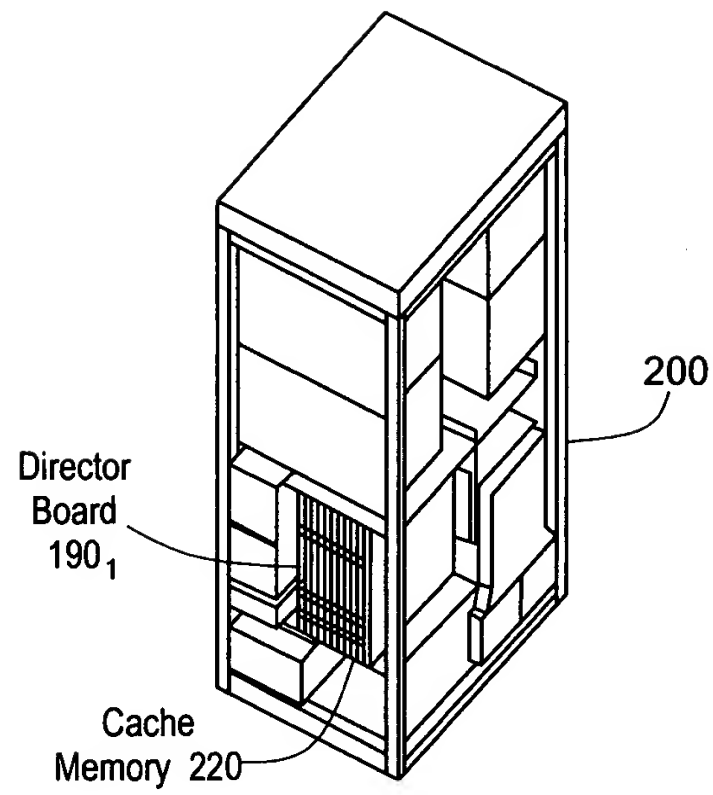


FIG. 3

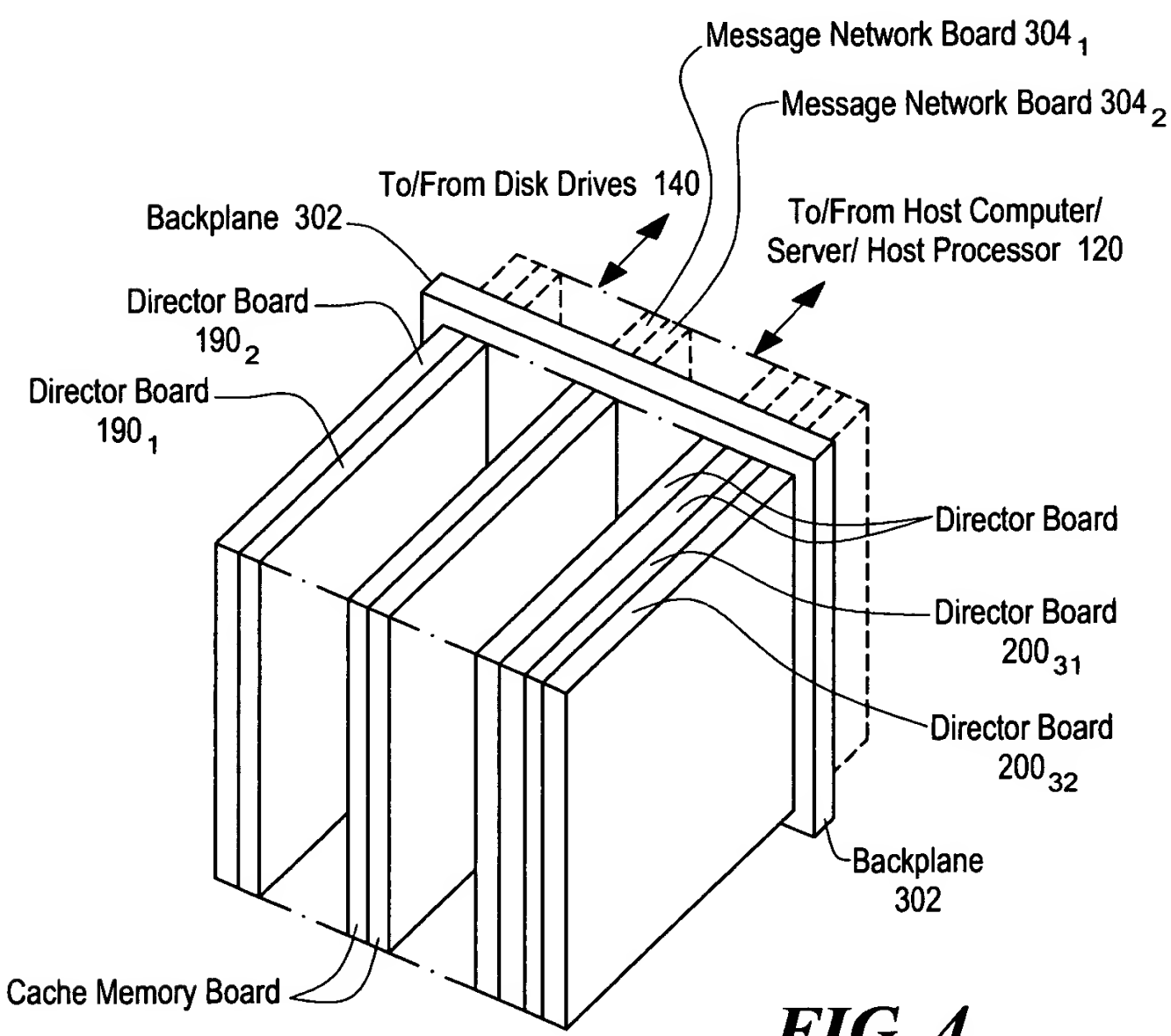


FIG. 4

OIPE
MAR 29 2005
PATENT & TRADEMARK OFFICE

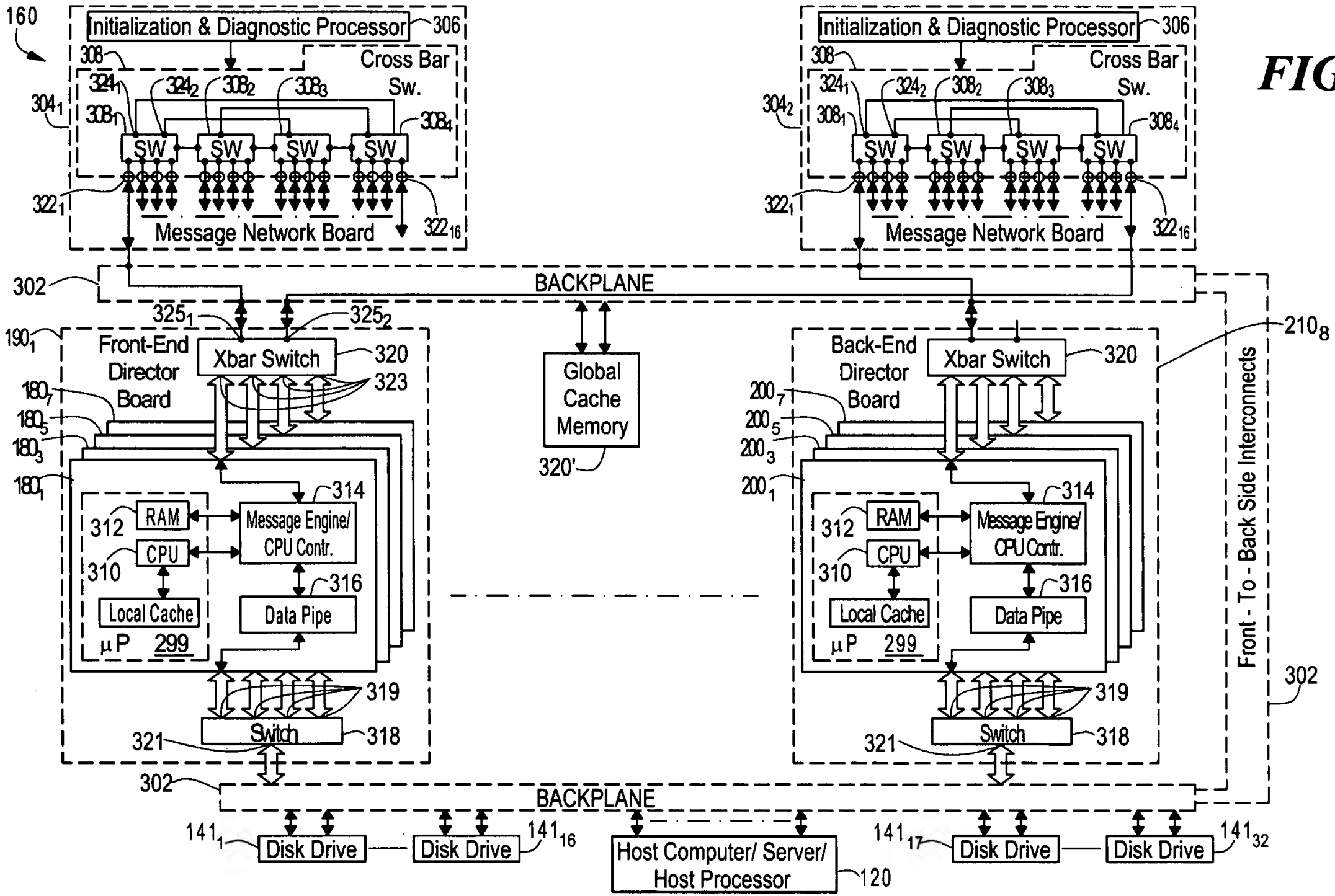


FIG. 5

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

FIG. 6

FIG. 6A
FIG. 6B

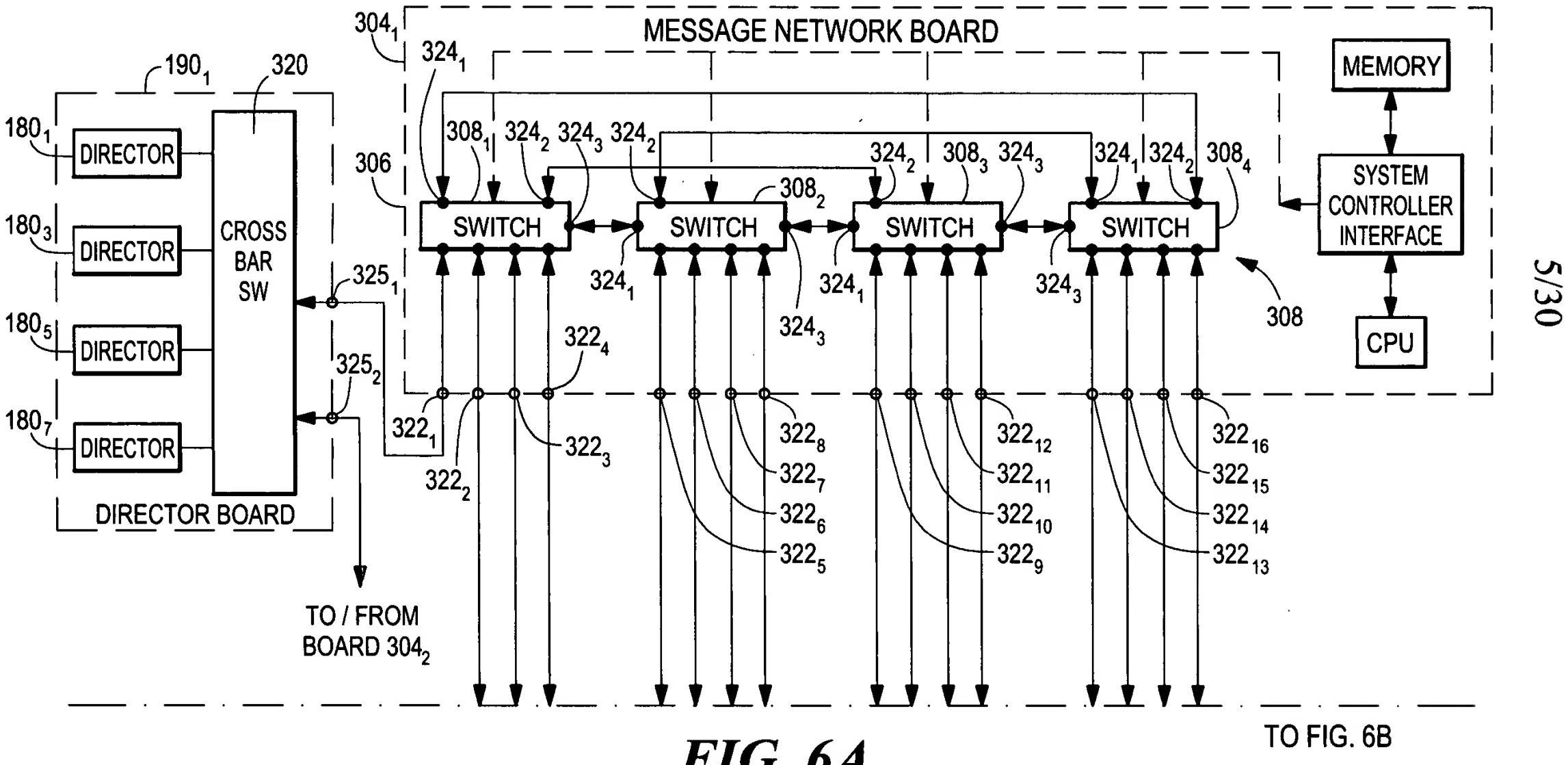


FIG. 6A

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

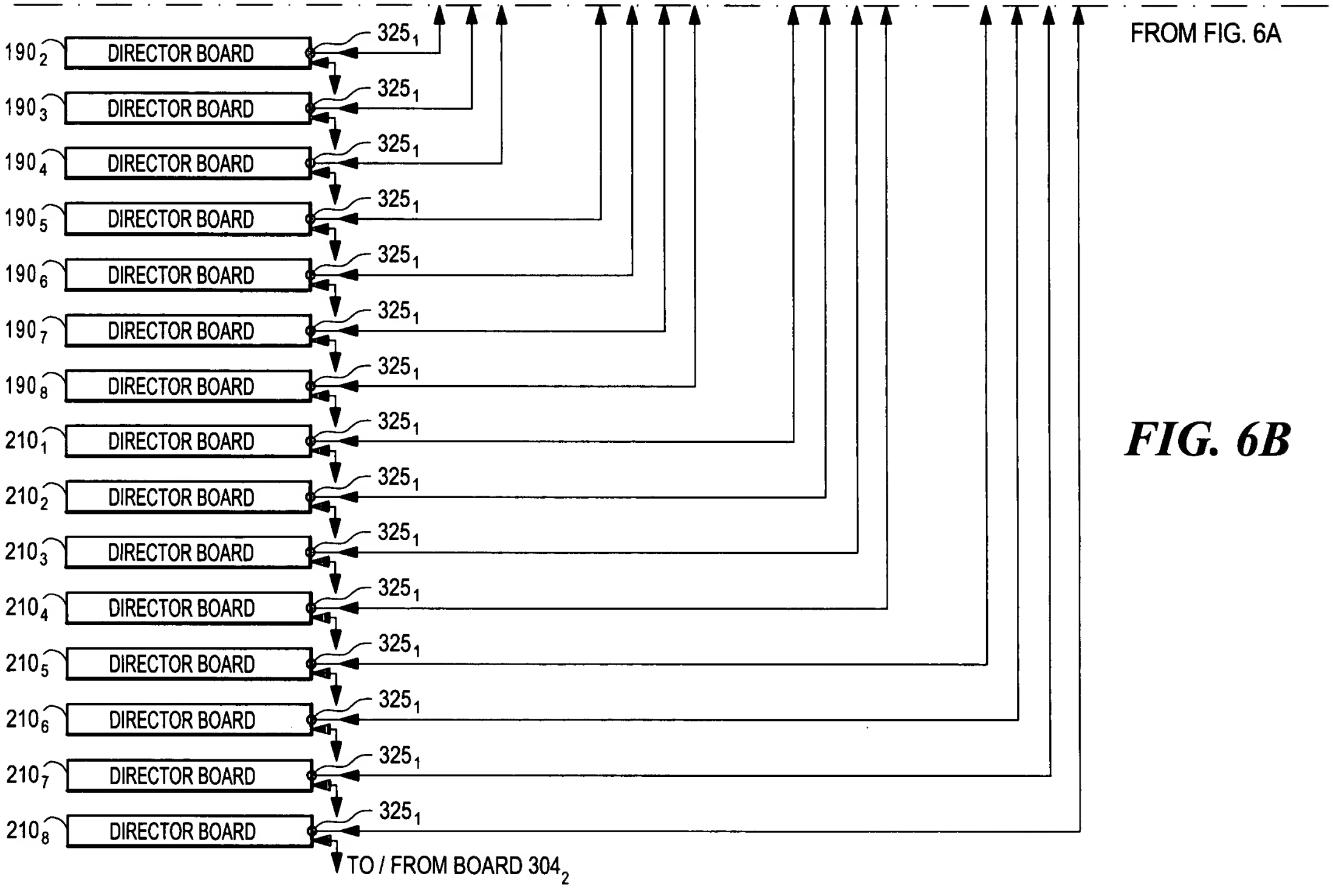


FIG. 6B

OIPE
JC110 MAR 29 2005
TRADEMARK OFFICE

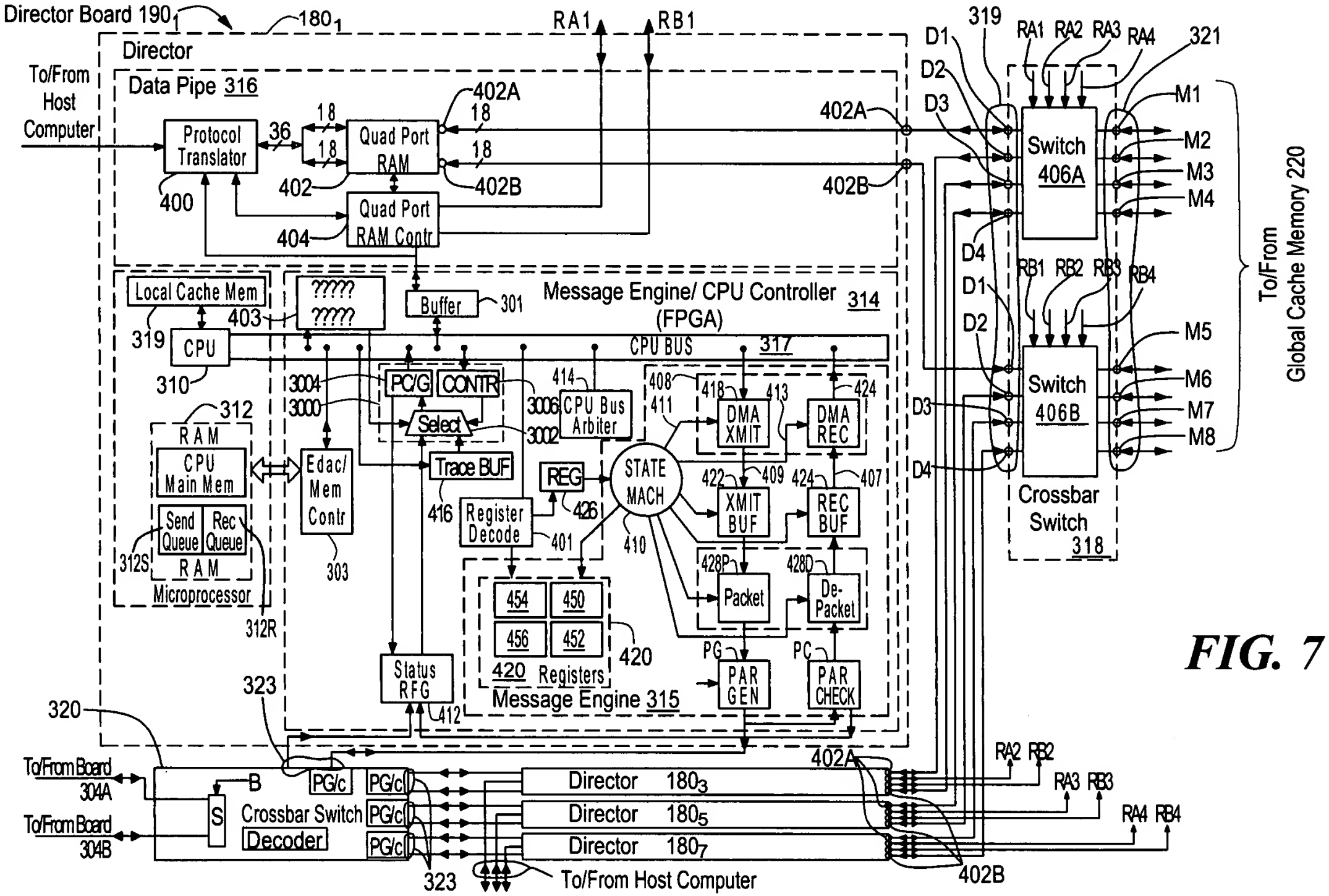


FIG. 7

OIPE JC110
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

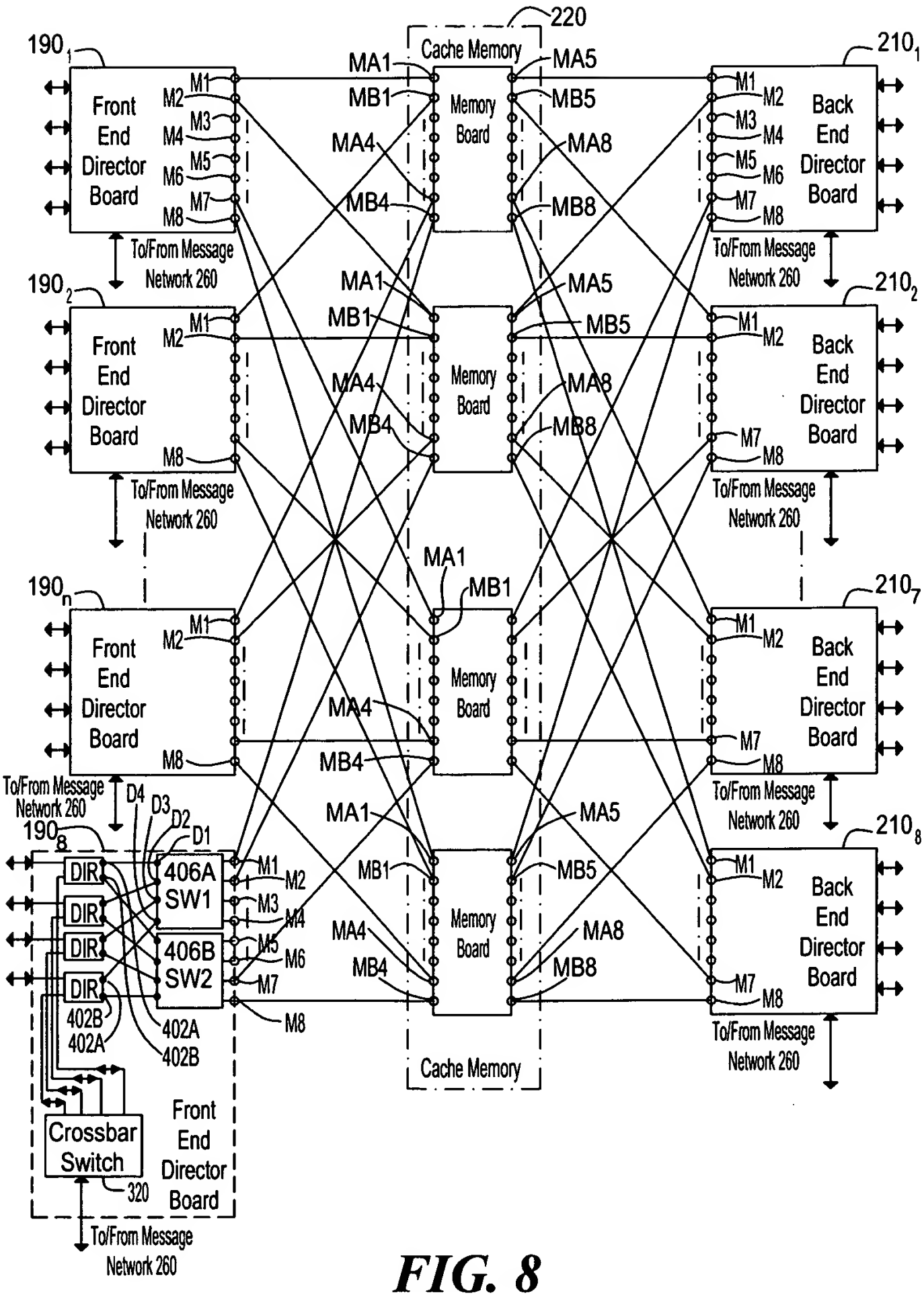


FIG. 8

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

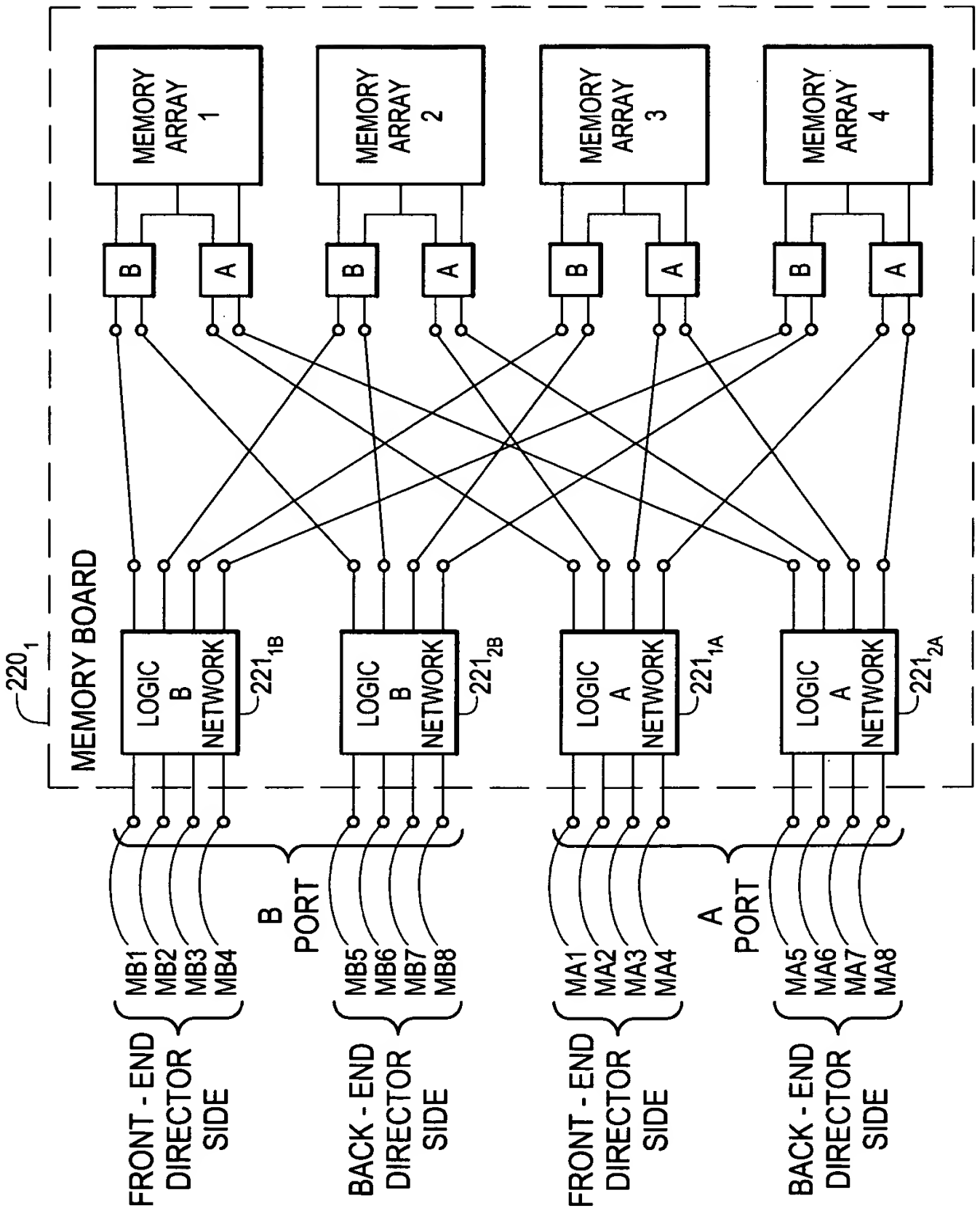


FIG. 8A

OIPE JC10
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

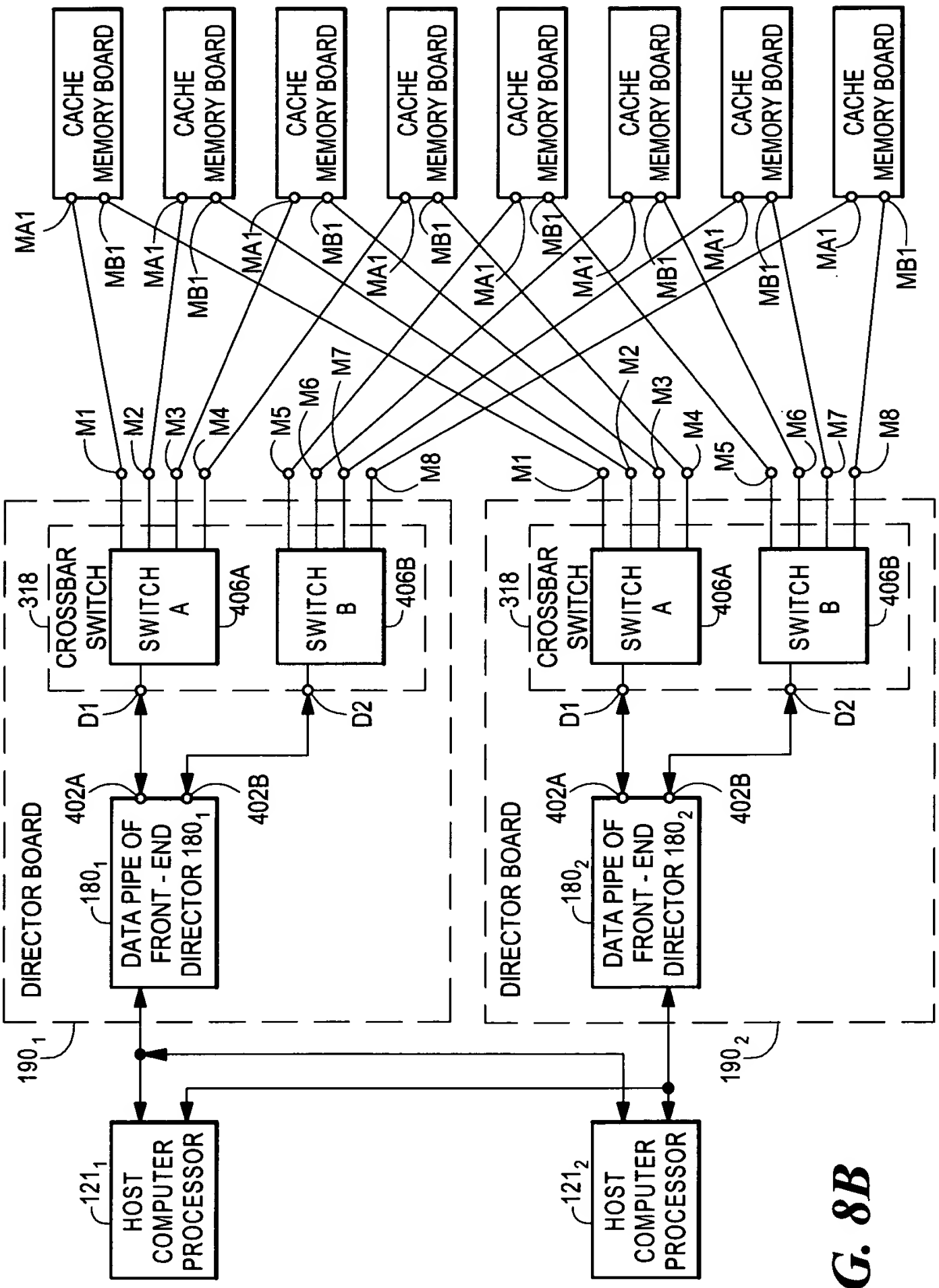


FIG. 8B

OIPE JC110
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

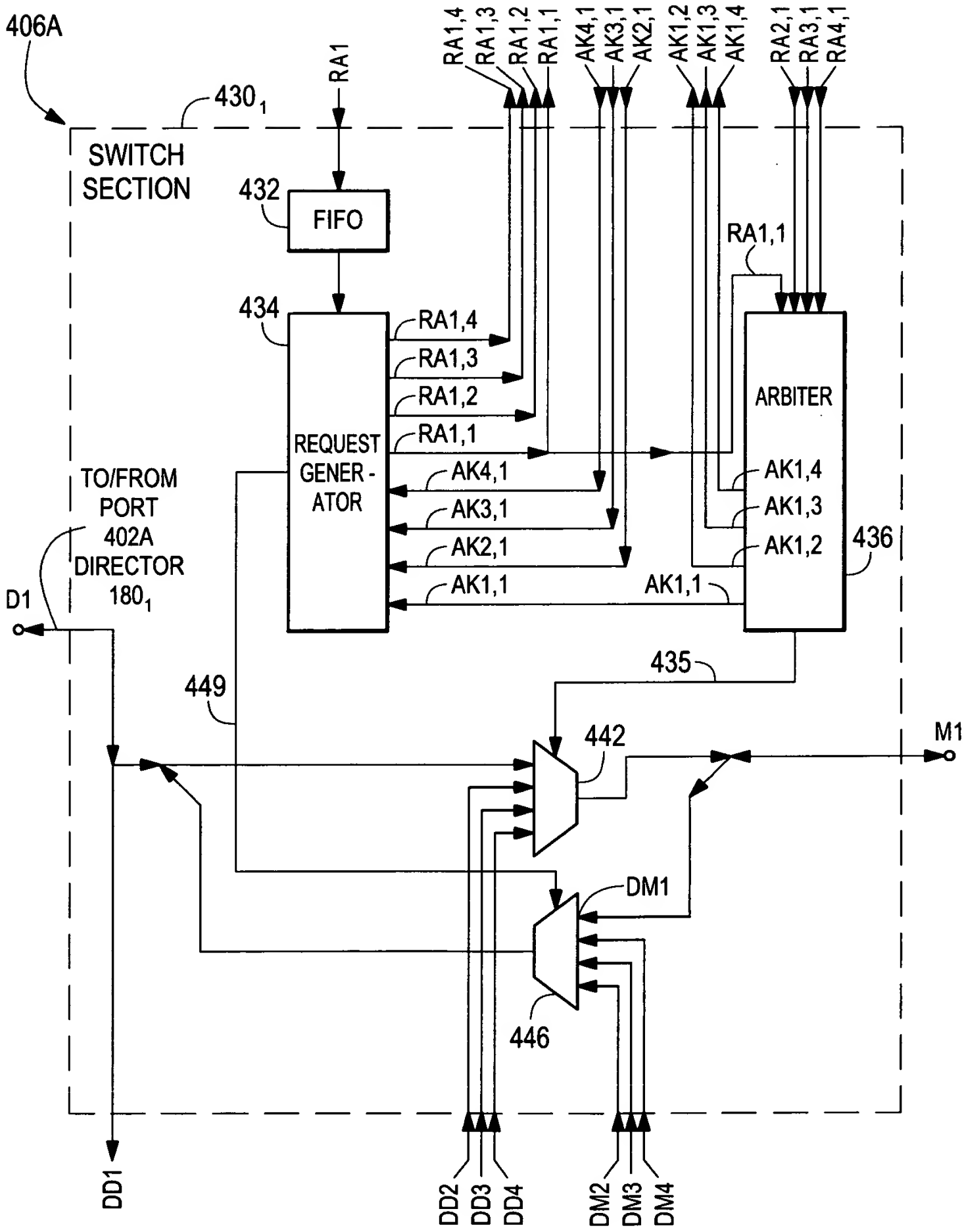


FIG. 8C-1

FIG. 8C

FIG. 8C-1
FIG. 8C-2

PATENT & TRADEMARK OFFICE
MAR 29 2005
JC110 Rec'd PCT/PTO

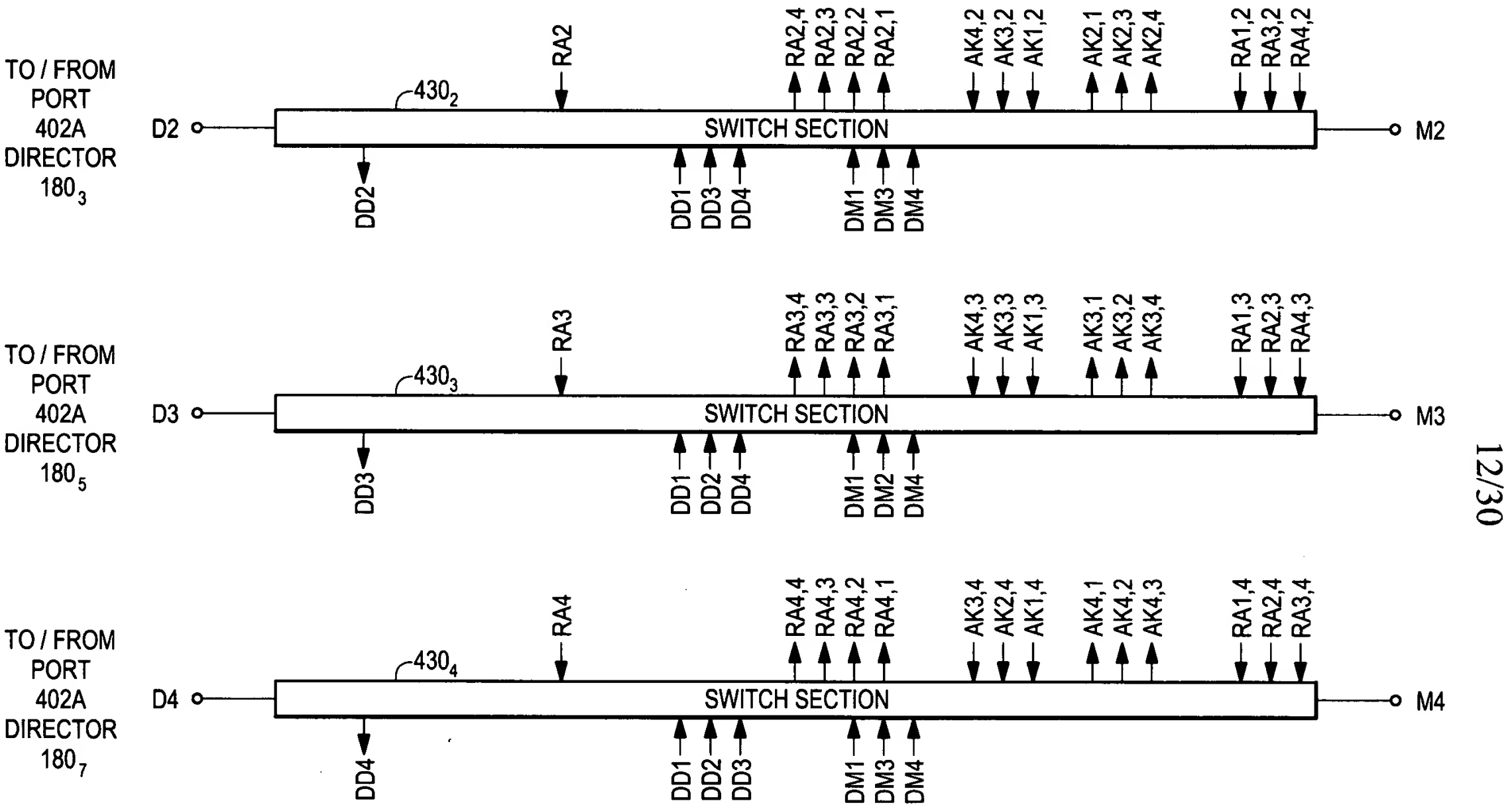


FIG. 8C-2

PATENT & TRADEMARK OFFICE
MAR 29 2005
OIPE
JC110

Transmit Datapath

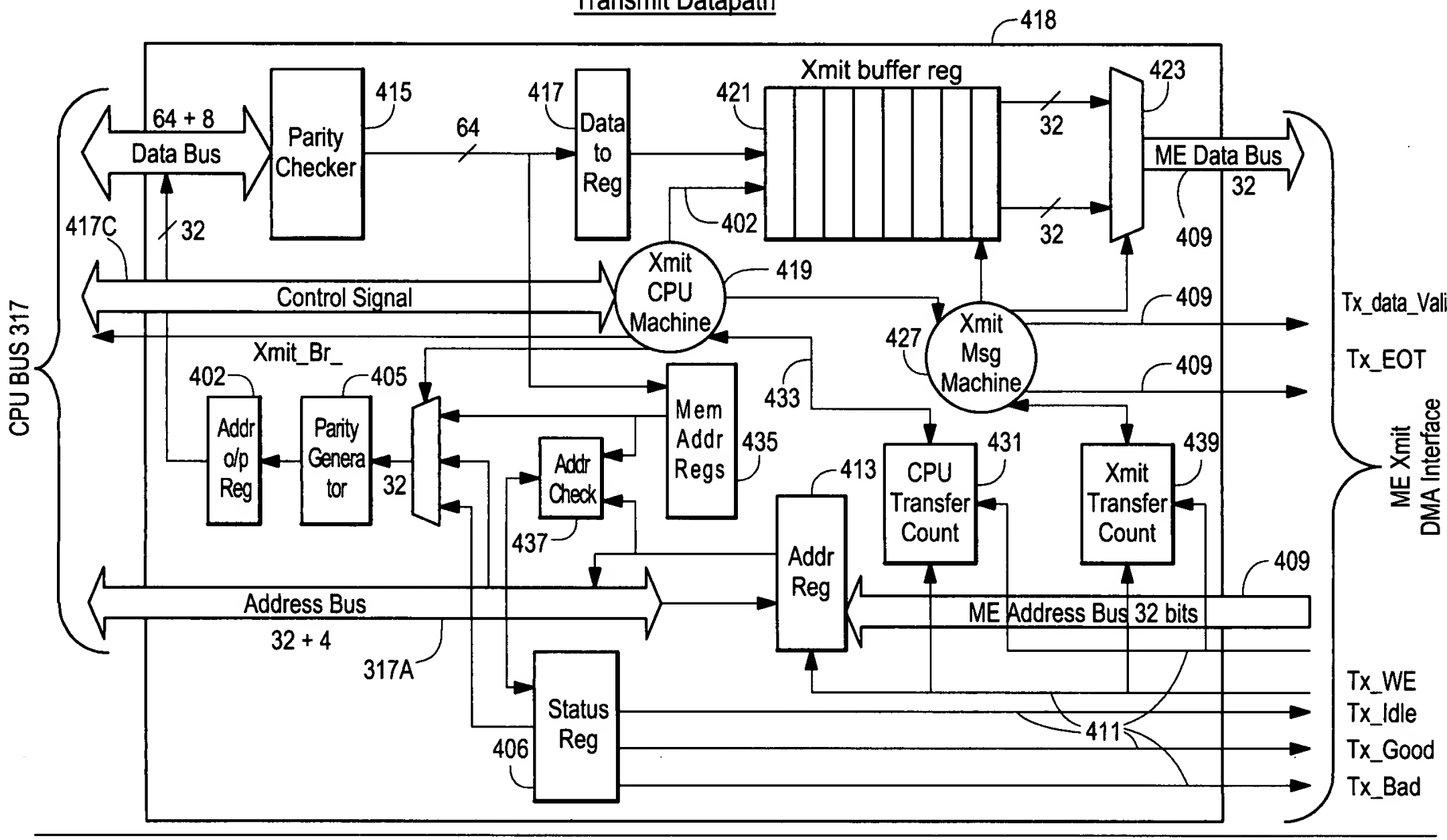


FIG. 9

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

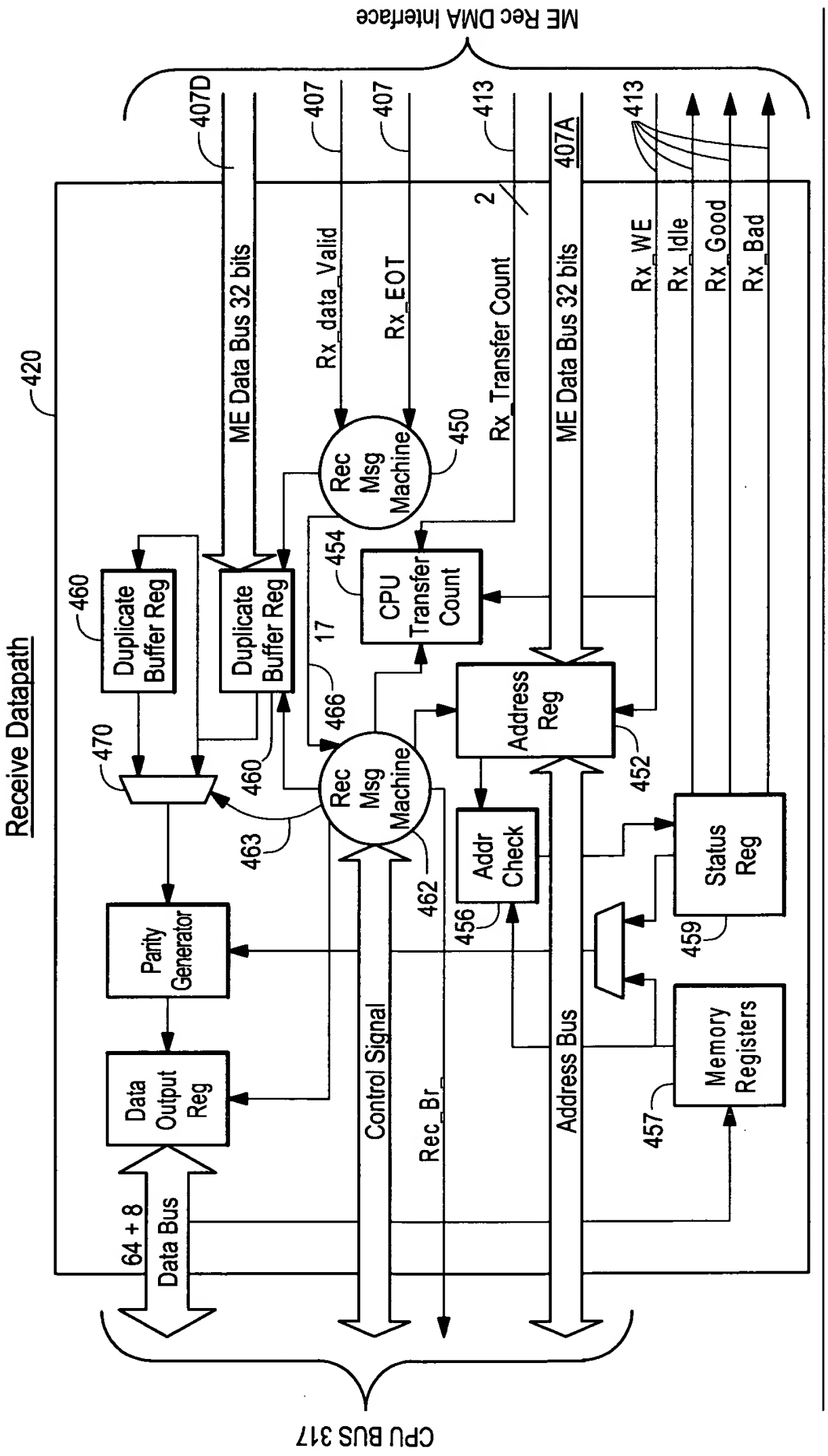


FIG. 10

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

FIG. 11A

FIG. 11B

FIG. 11

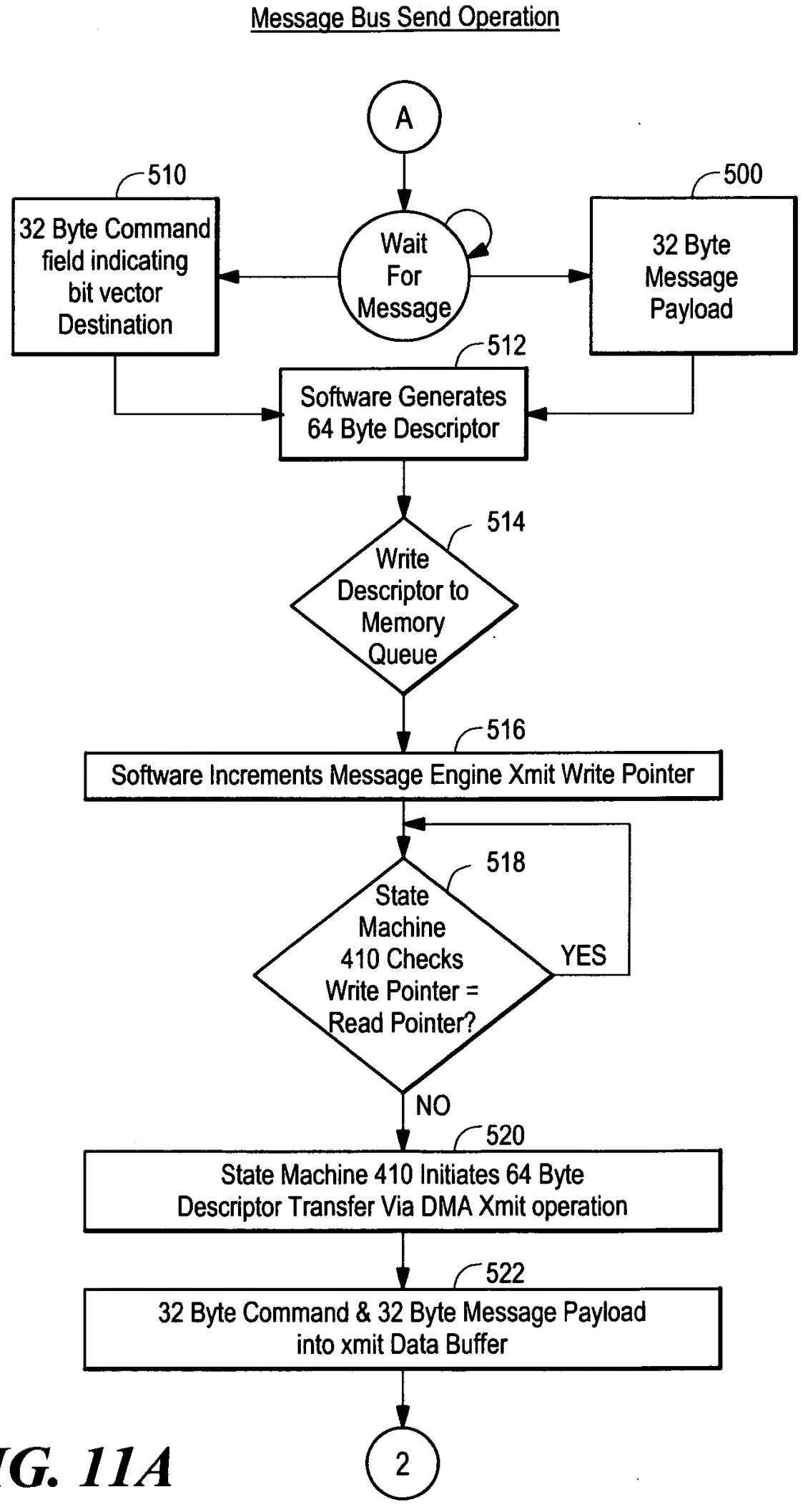


FIG. 11A

OIPE
JC110
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

Message Bus Send Operation Continued

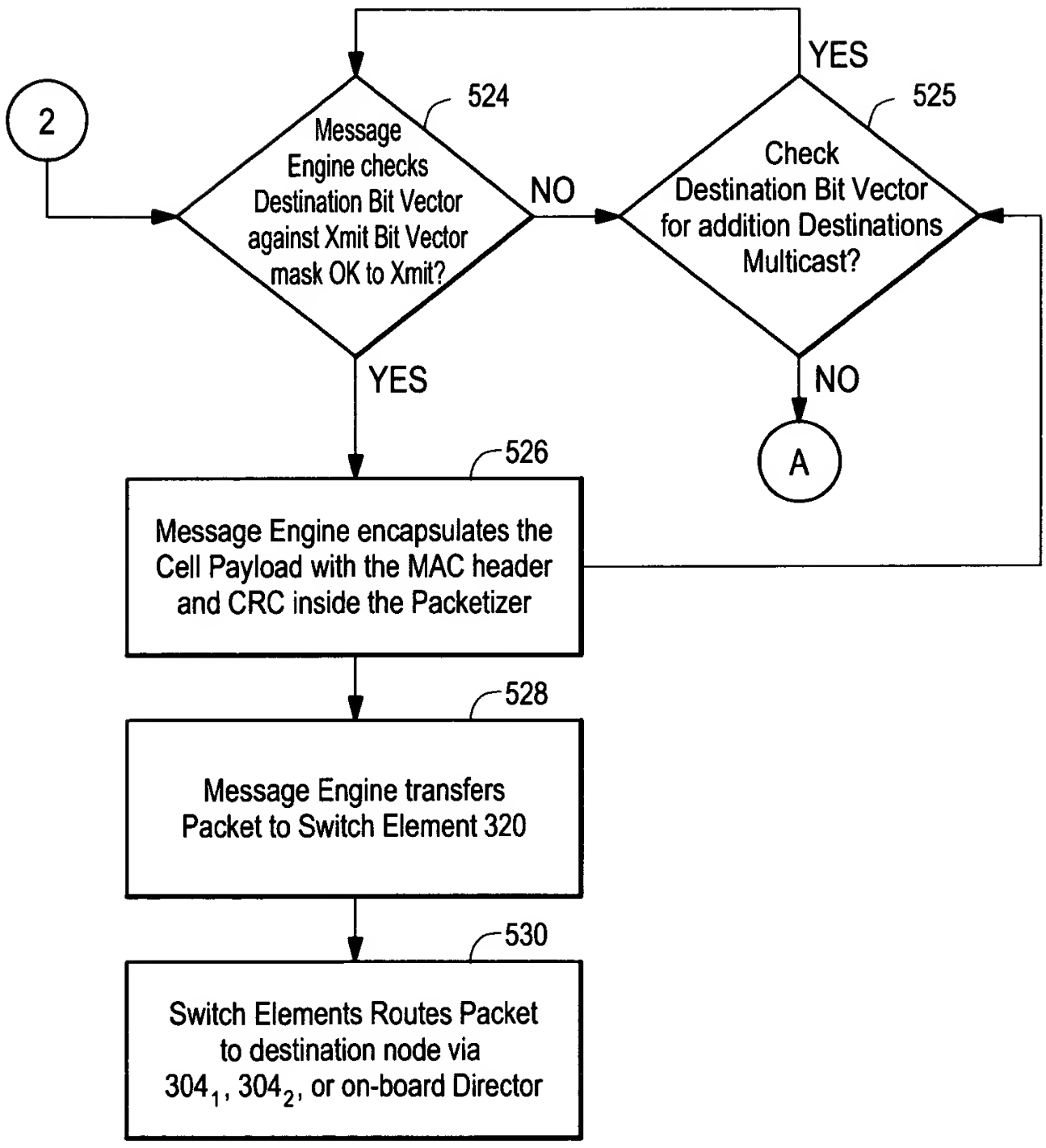


FIG. 11B

PATENT & TRADEMARK OFFICE
MAR 29 2005
JC110

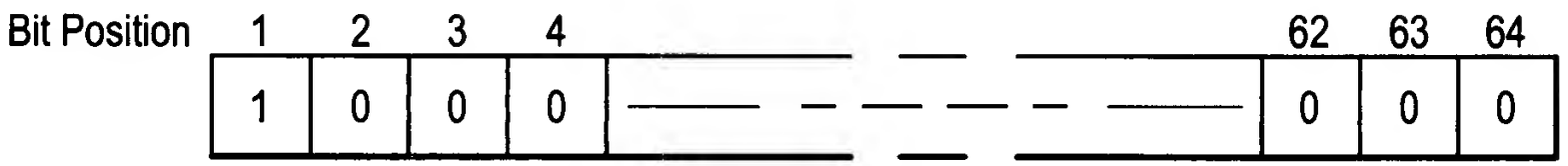


FIG. 11C

FIG. 11D

FIG. 11E

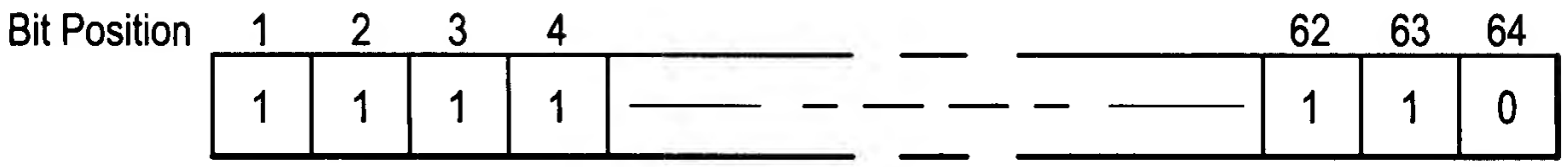


FIG. 11F

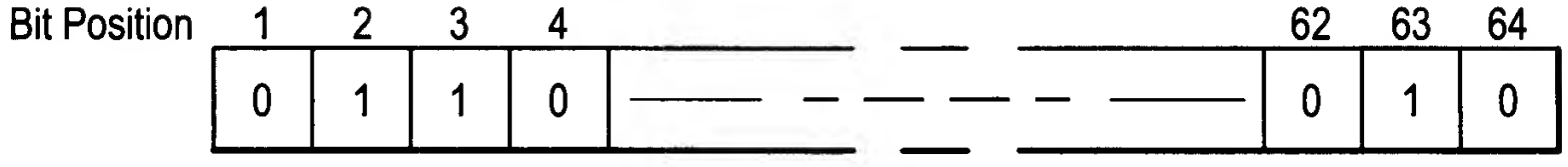


FIG. 11G

OIPE
MAR 29 2005
JC110 Rec'd PCT/PTO

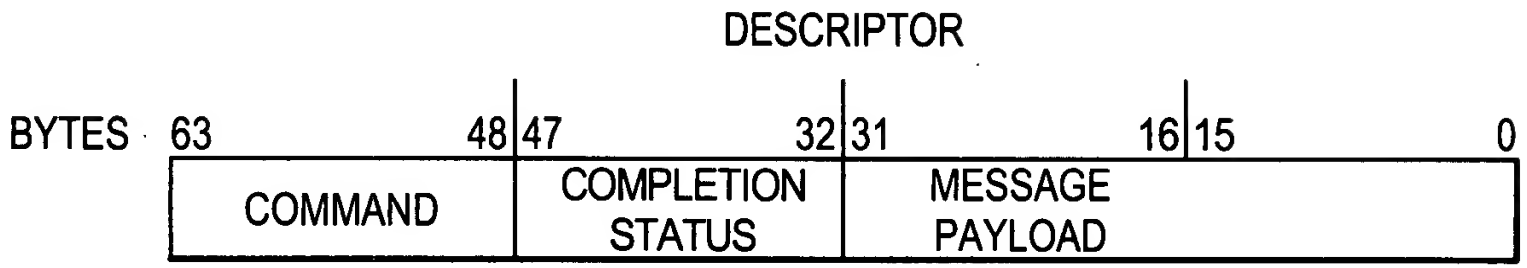


FIG. 2A

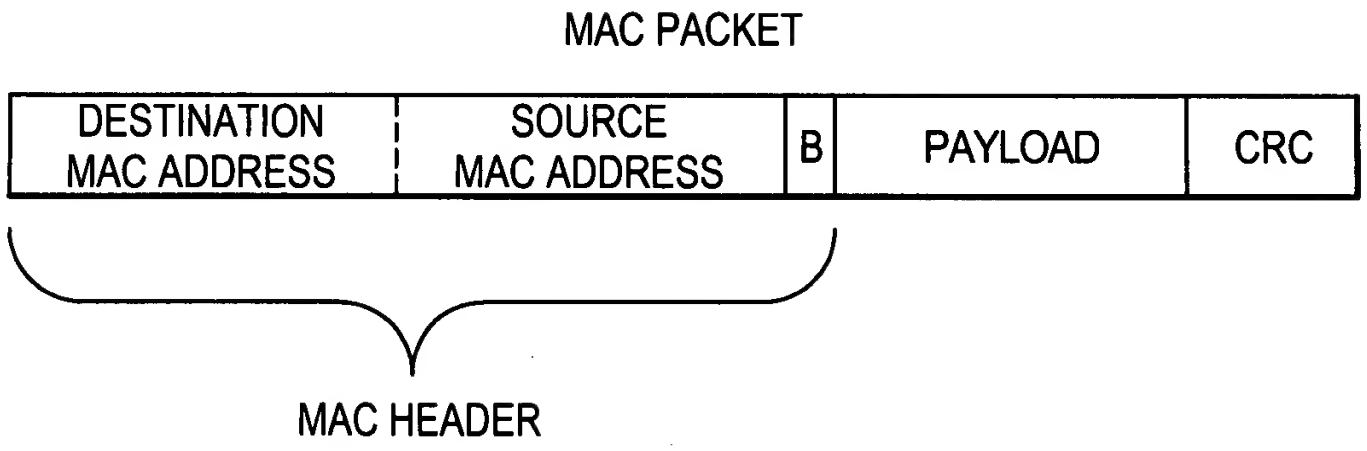


FIG. 2B

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

FIG. 12

FIG. 12A

FIG. 12B

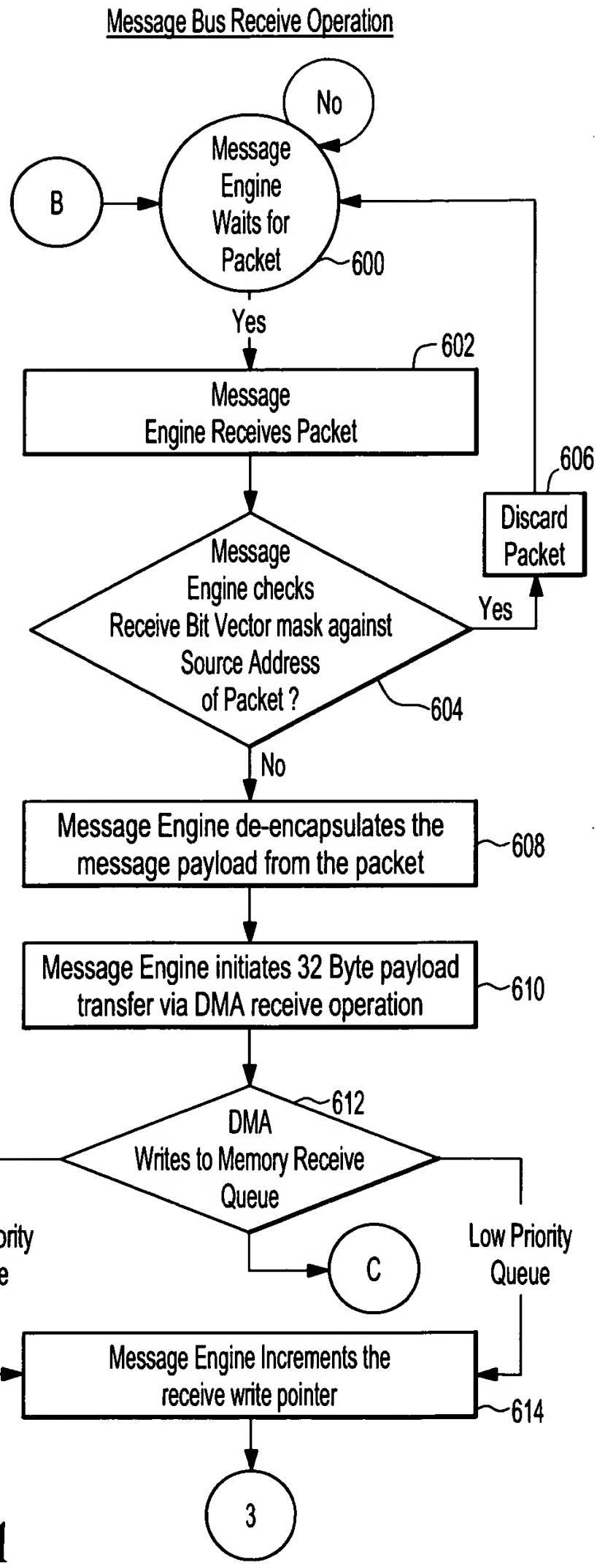


FIG. 12A

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

Message Bus
Receive Operation Continued

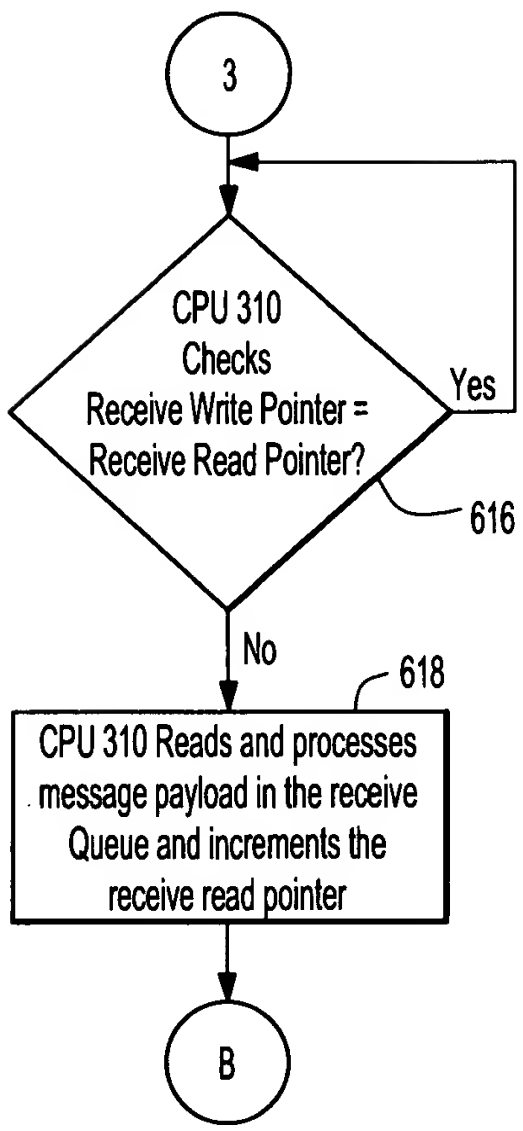


FIG. 12B

Message Bus
Acknowledgement Operation

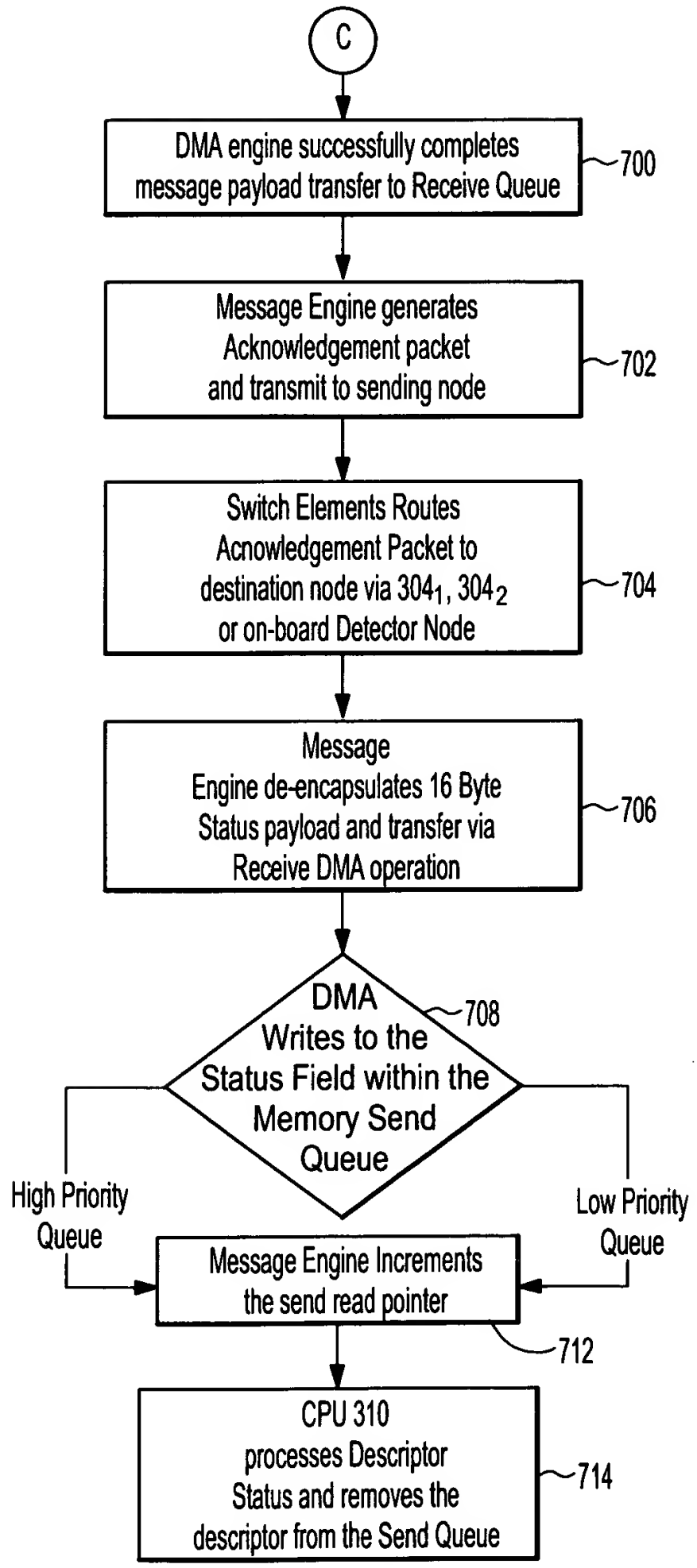


FIG. 13

OIPE
MAR 2 9 2005
JC110
PATENT & TRADEMARK OFFICE

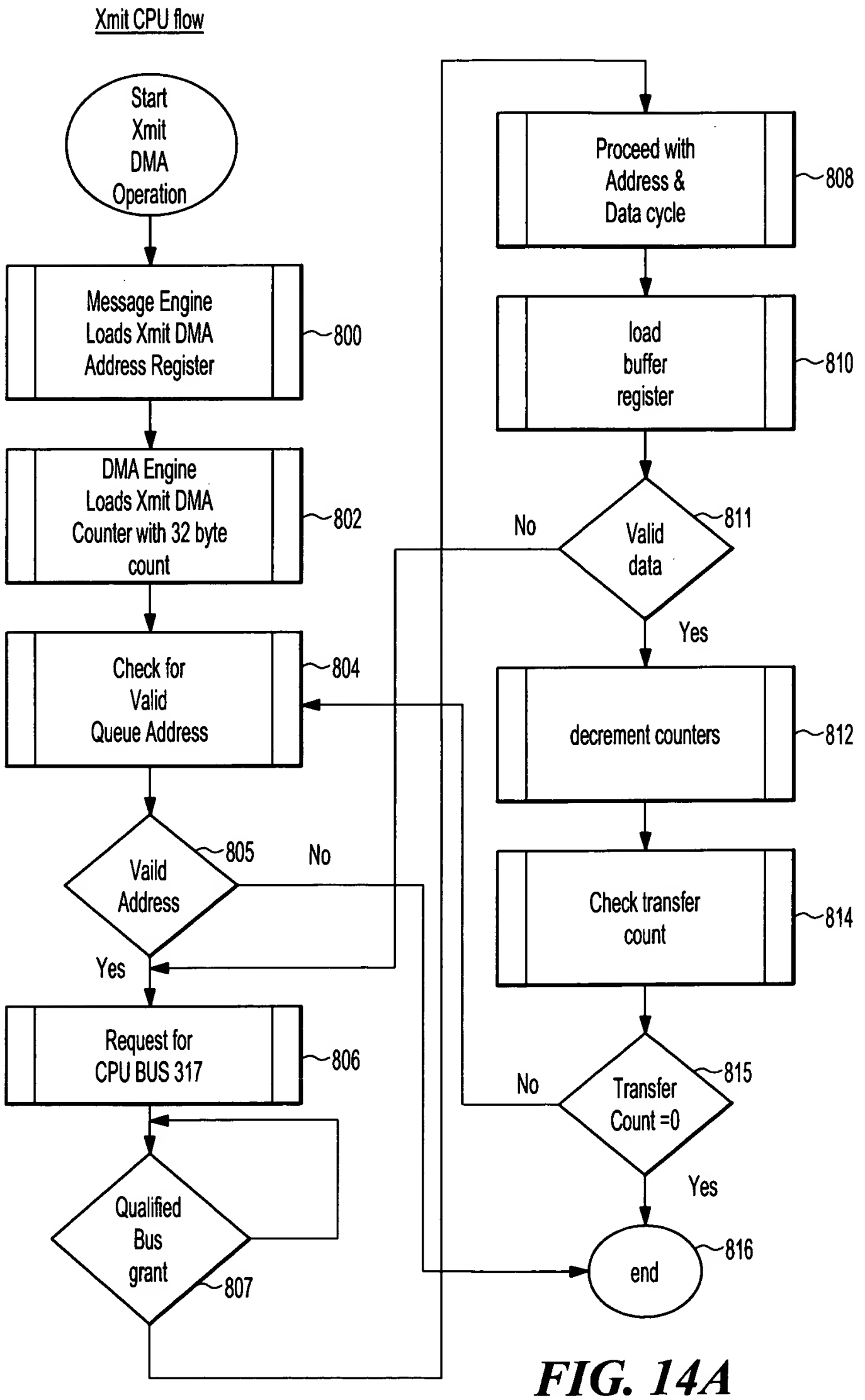


FIG. 14A

OIPE
JC110
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

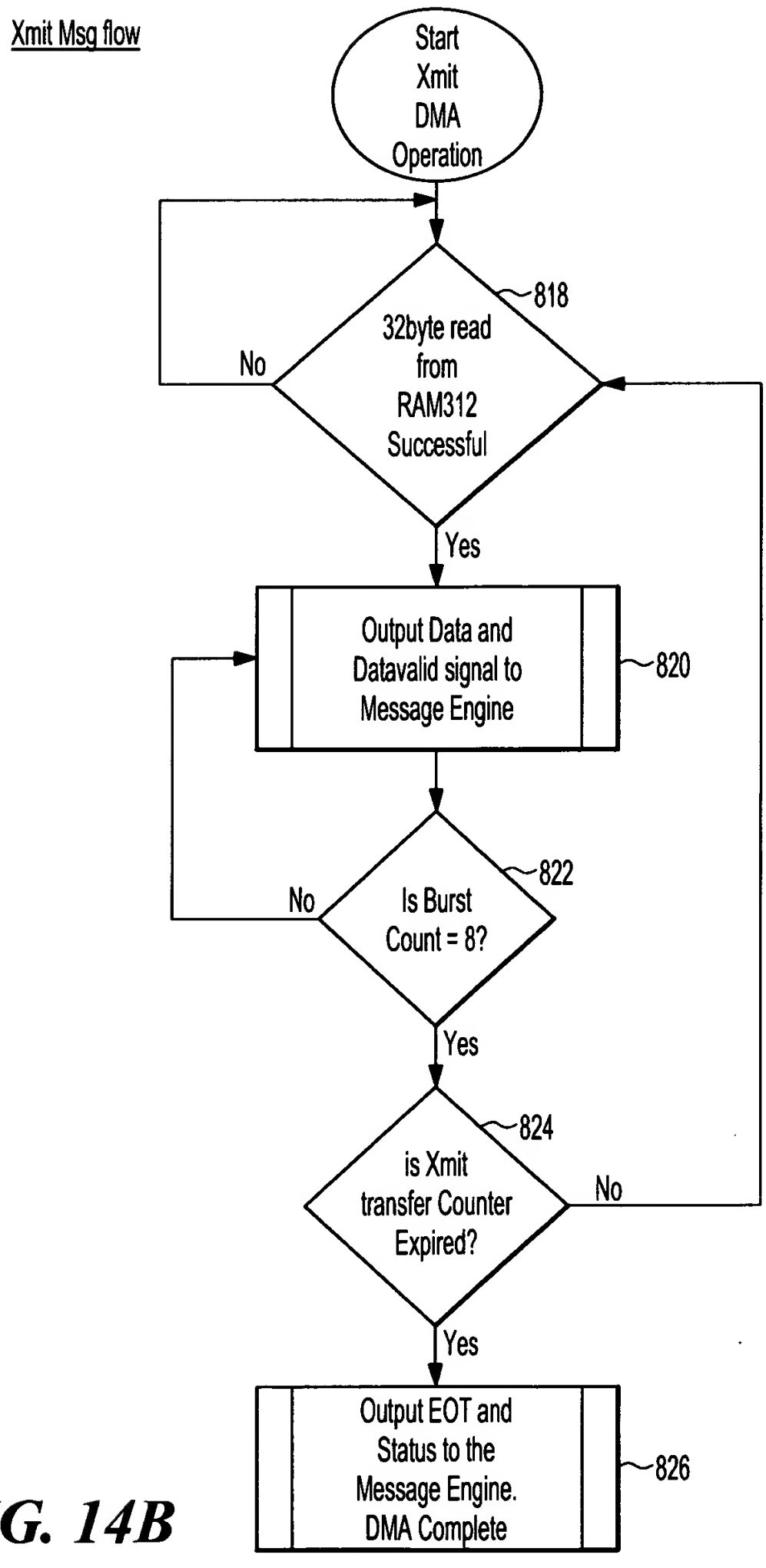


FIG. 14B

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

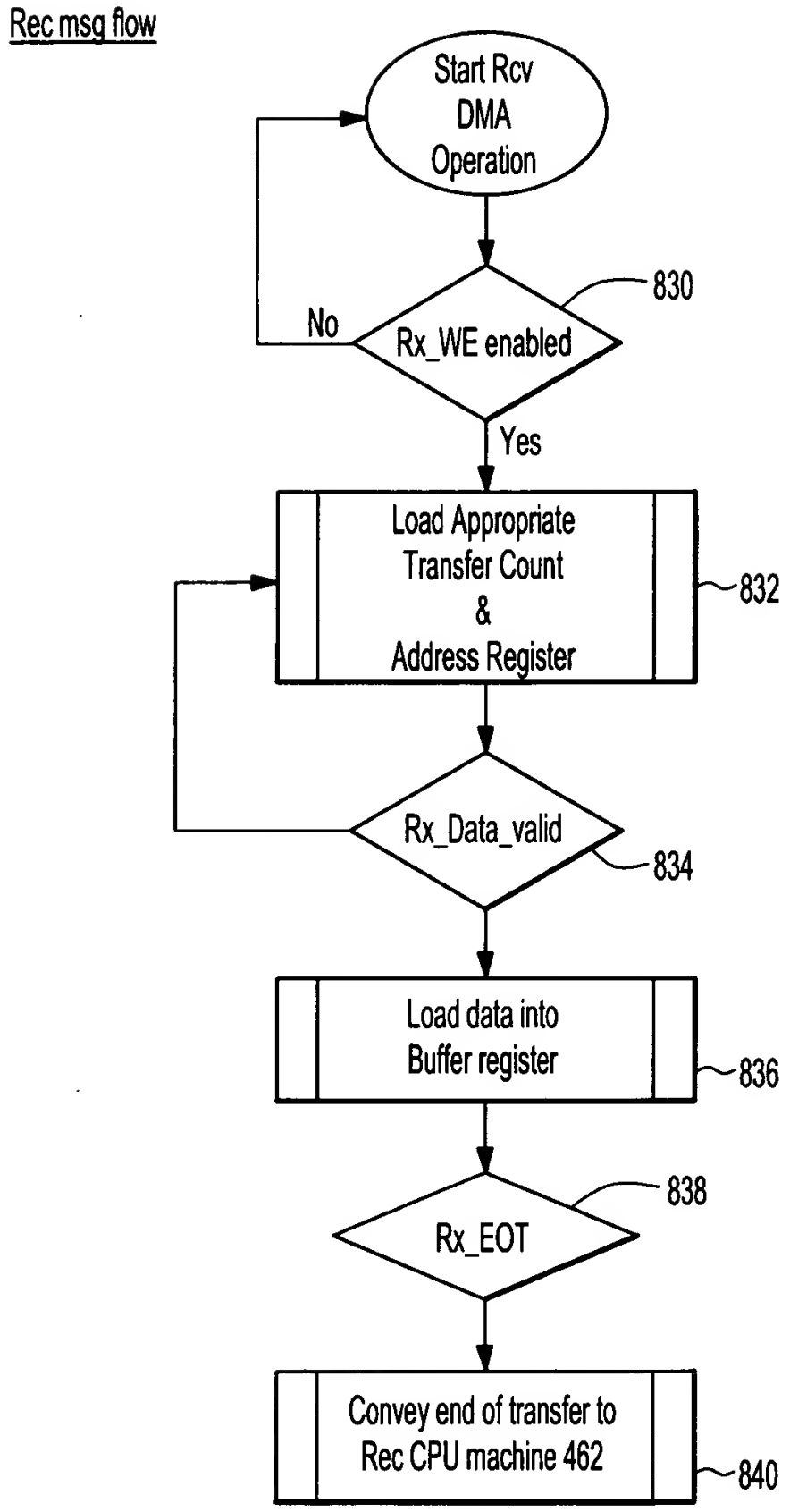


FIG. 15A

OIPE
JC110
MAR 2 9 2005
PATENT & TRADEMARK OFFICE

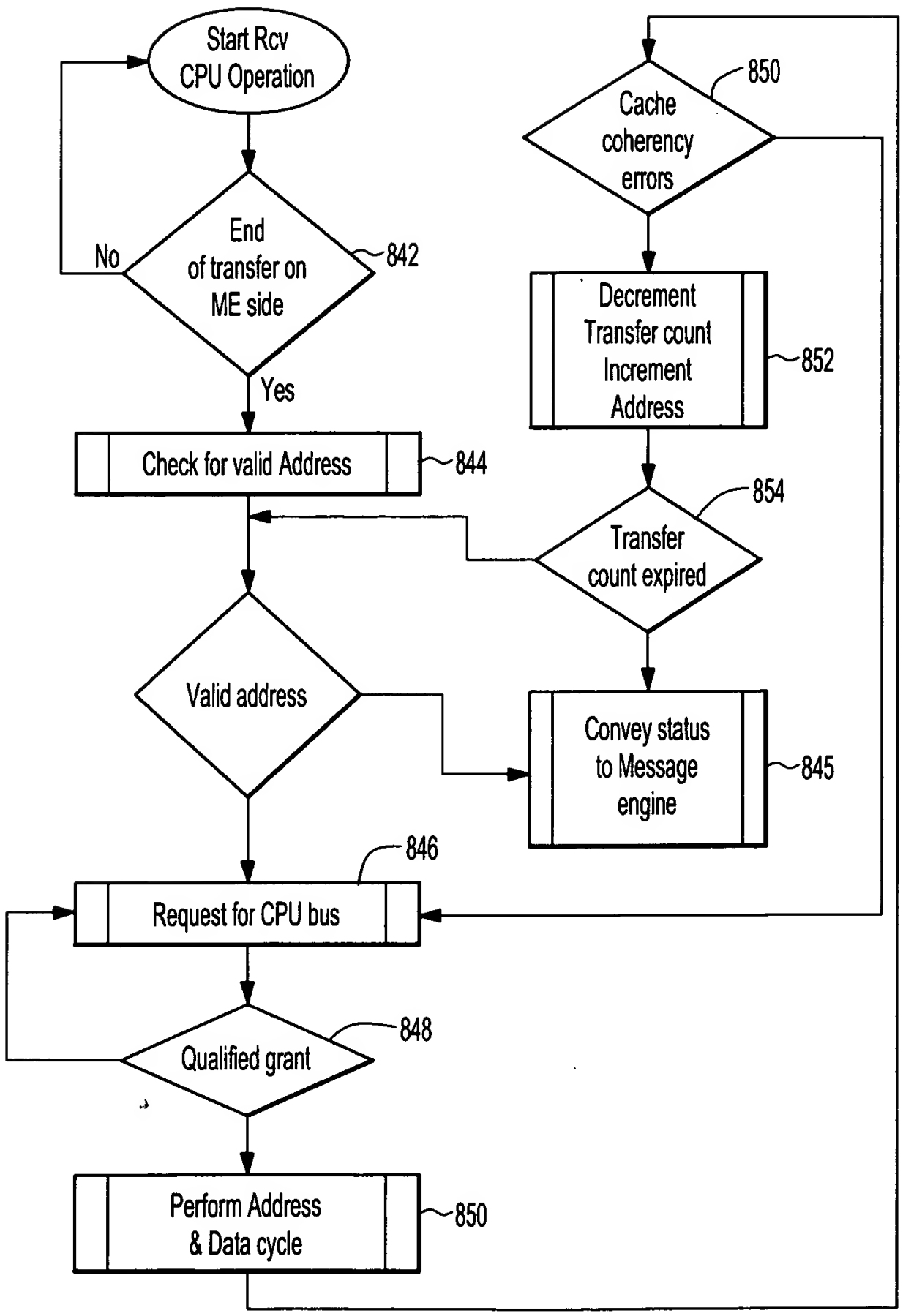


FIG. 15B

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
MAR 29 2005
OIPE
JC110

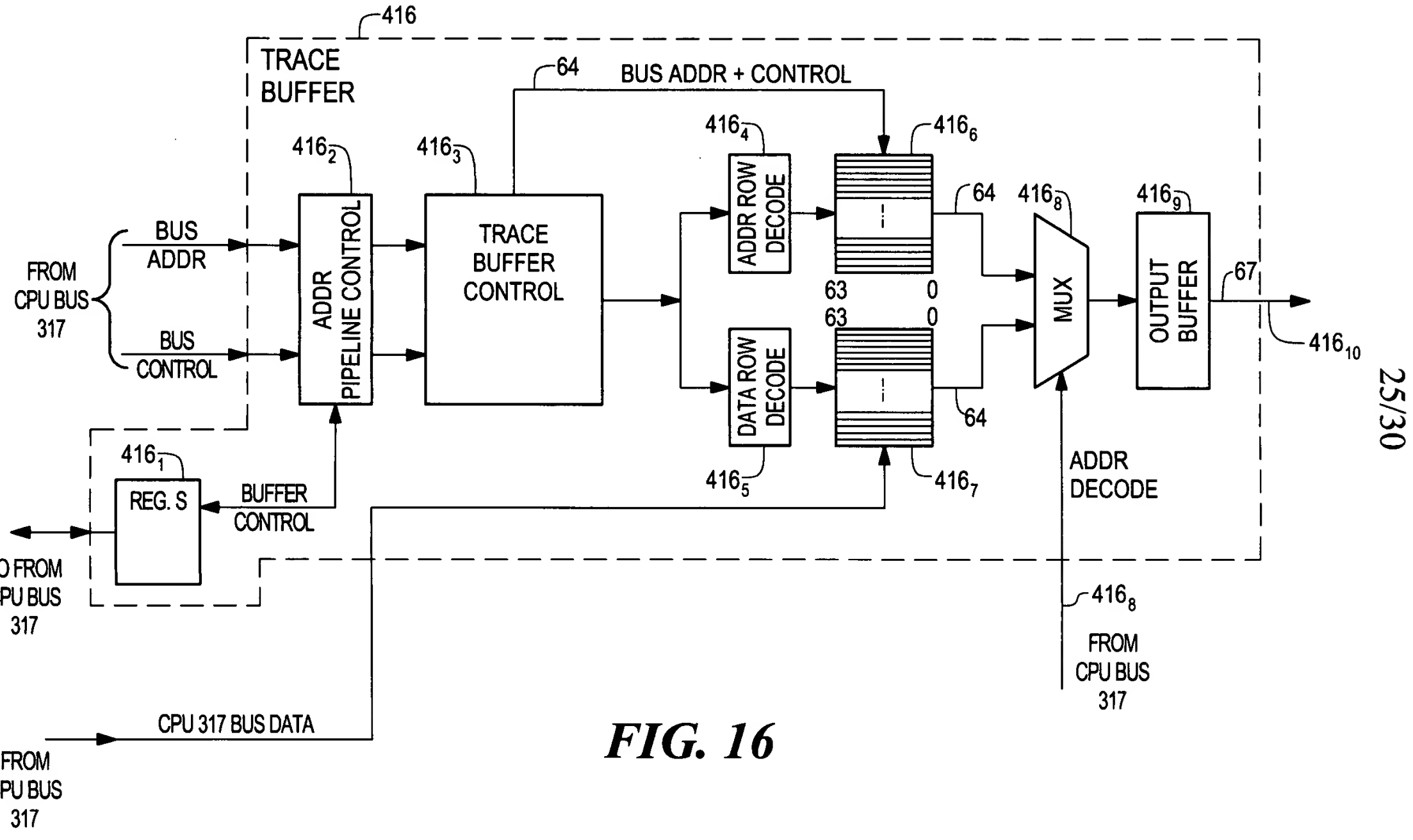


FIG. 16

OIPE
MAR 2 9 2005
JC110
PATENT & TRADEMARK OFFICE

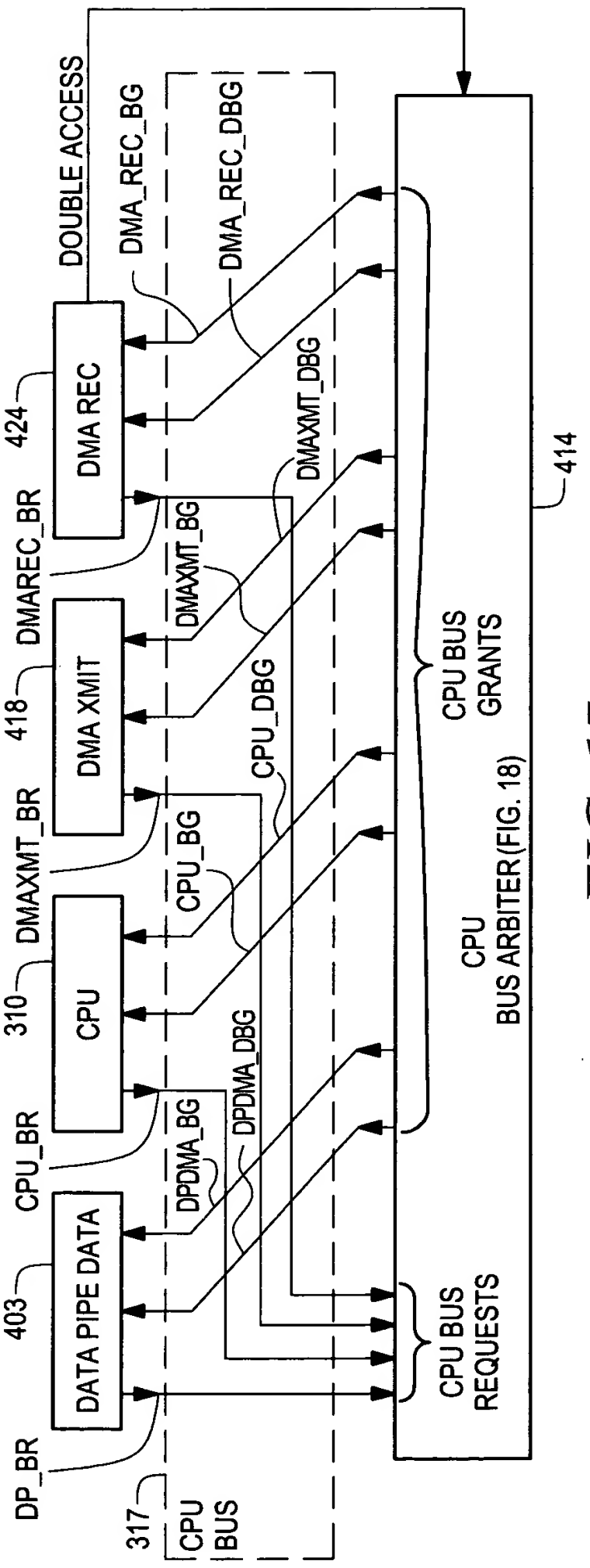


FIG. 17

OIPE
MAR 29 2005
PATENT & TRADEMARK OFFICE JC110

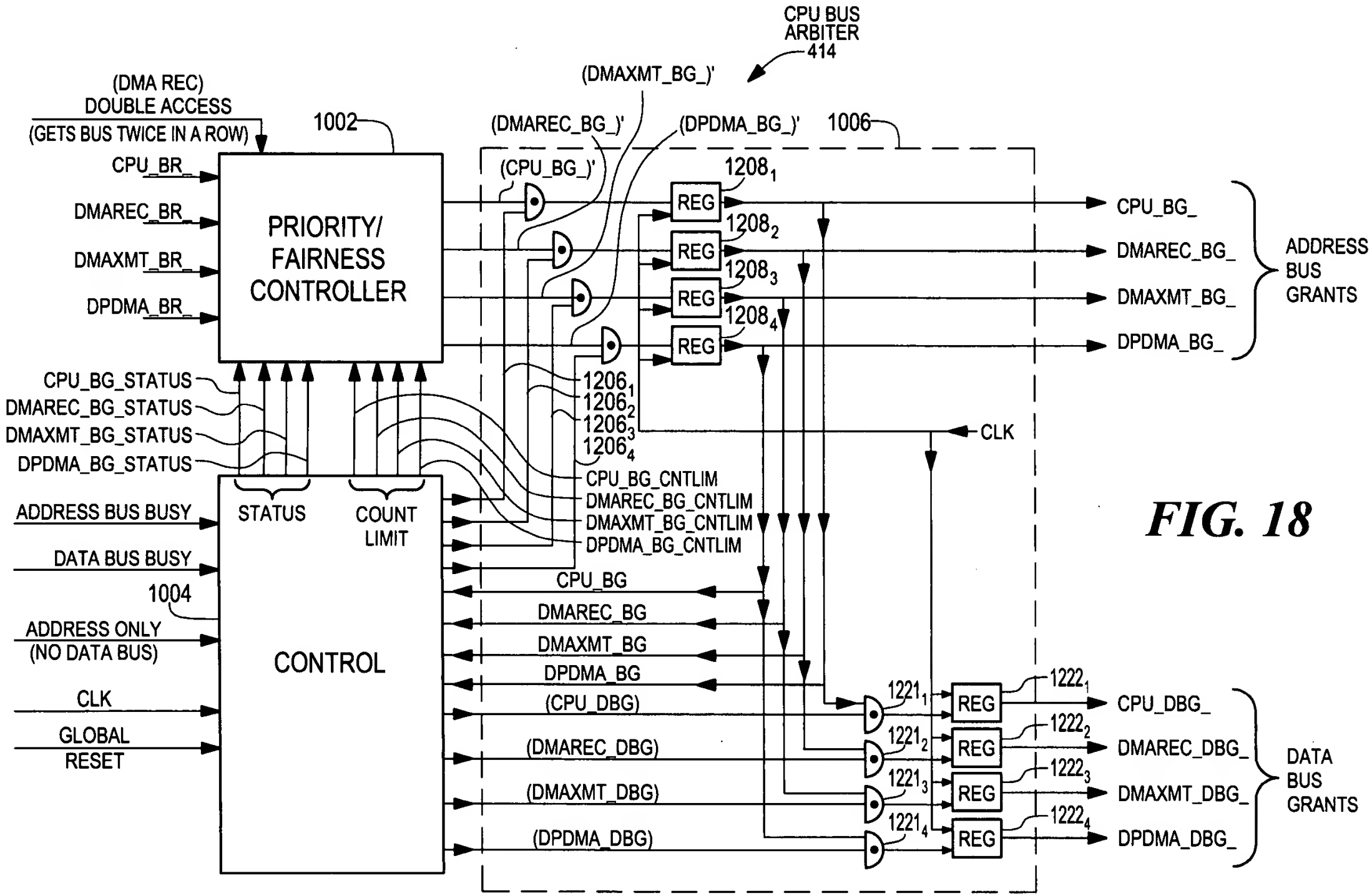


FIG. 18

PATENT & TRADEMARK OFFICE
MAR 29 2005
OIPE

POTENTIAL GRANT TO	CPU_ BR	DMAREC_ BR	DMAXMT_ BR	DPDMA_ BR	CPU_BG_ STATUS	DMAREC_BG_ STATUS	DMAXMT_BG_ STATUS	DPDMA_BG_ STATUS	CPU_BG_ CNTLIM	DMAREC_BG_ CNTLIM	DMAXMT_BG_ CNTLIM	DPDMA_BG_ CNTLIM	DOUBLE ACCESS
(CPU_BG)'	DC	0	0	0	DC	DC	DC	DC	DC	DC	DC	DC	DC
(CPU_BG)'	1	DC	DC	DC	0	DC	DC	DC	DC	0	0	0	0
(CPU_BG)'	1	DC	DC	DC	DC	DC	DC	DC	1	DC	DC	DC	0
(DMAREC_BG)'	0	1	0	0	DC	DC	DC	DC	DC	DC	DC	DC	DC
(DMAREC_BG)'	DC	1	DC	DC	DC	1	DC	DC	DC	DC	DC	0	1
(DMAREC_BG)'	0	1	DC	DC	DC	0	DC	DC	DC	DC	0	0	DC
(DMAREC_BG)'	1	1	DC	DC	1	DC	DC	DC	0	DC	0	0	DC
(DMAREC_BG)'	DC	1	DC	DC	DC	DC	DC	DC	0	1	DC	DC	DC
(DMAXMT_BG)'	0	0	1	0	DC	DC	DC	DC	DC	DC	DC	DC	DC
(DMAXMT_BG)'	0	0	1	DC	DC	DC	0	DC	DC	DC	DC	0	DC
(DMAXMT_BG)'	0	1	1	DC	DC	1	DC	DC	DC	DC	DC	0	0
(DMAXMT_BG)'	1	0	1	DC	1	DC	DC	DC	DC	DC	DC	0	DC
(DMAXMT_BG)'	DC	DC	1	DC	DC	DC	DC	DC	0	0	1	DC	0
(DPDMA_BG)'	0	0	0	1	DC	DC	DC	DC	DC	DC	DC	DC	DC
(DPDMA_BG)'	0	0	1	1	DC	DC	1	0	DC	DC	DC	DC	DC
(DPDMA_BG)'	0	1	0	1	DC	1	DC	DC	DC	DC	DC	DC	0
(DPDMA_BG)'	1	0	0	1	1	DC	DC	DC	DC	DC	DC	DC	DC
(DPDMA_BG)'	DC	DC	DC	1	DC	DC	DC	DC	0	0	0	1	0

FIG. 19

OIPE
MAR 2 9 2005
PATENT & TRADEMARK OFFICE
JC110

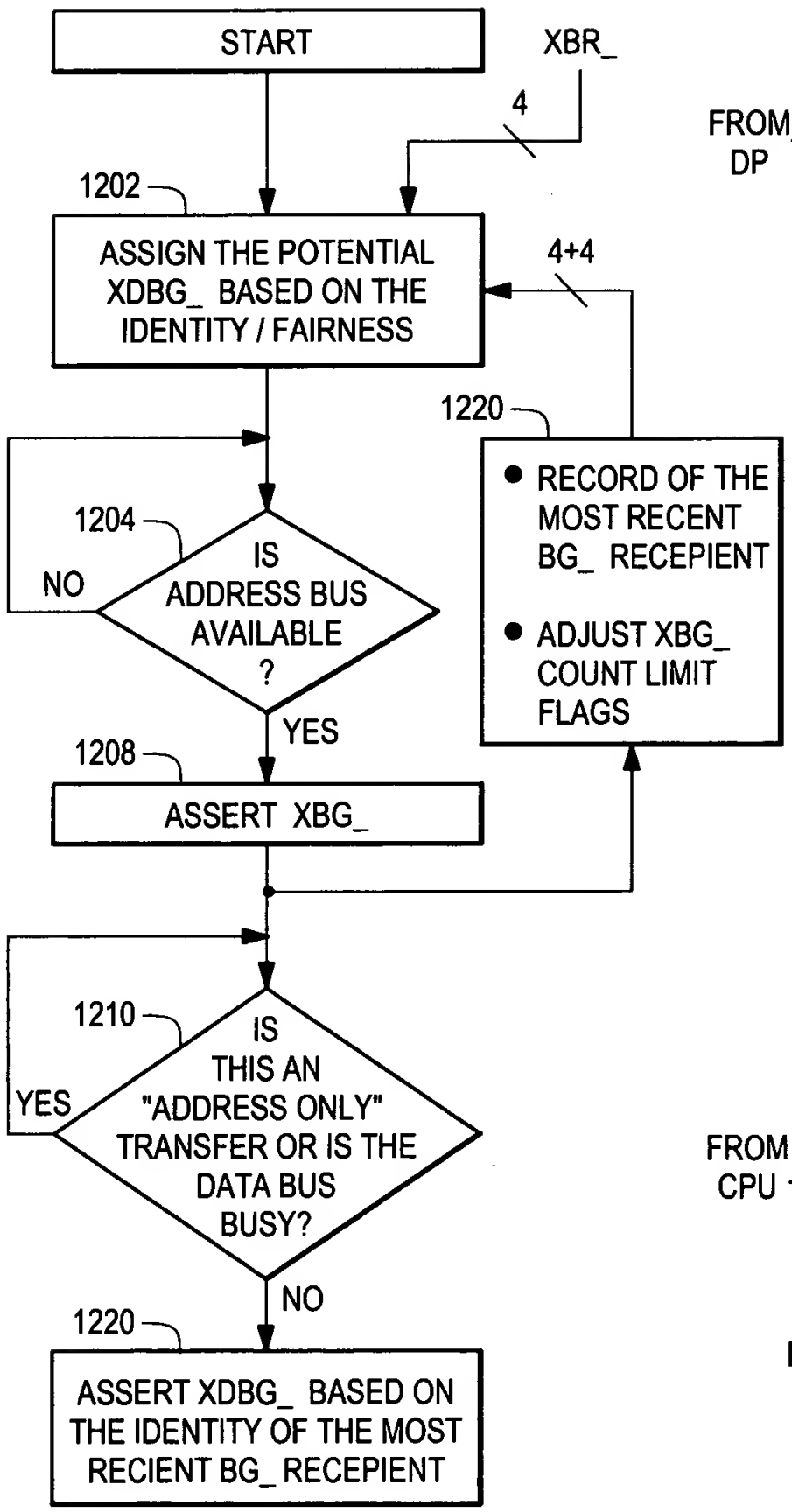


FIG. 20

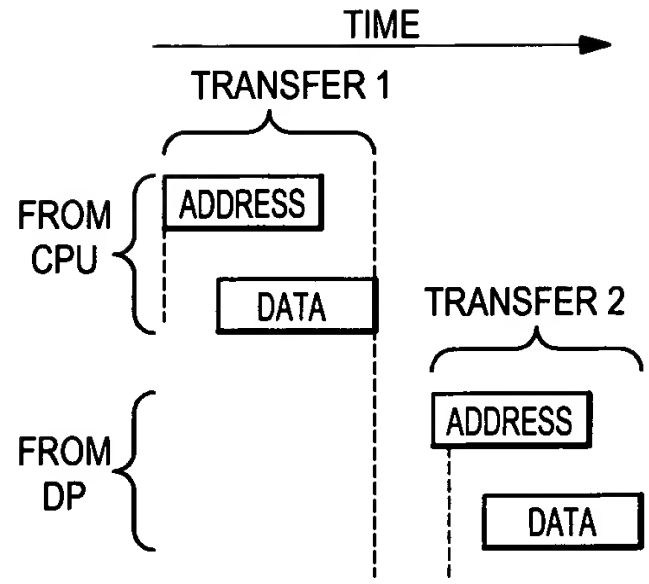


FIG. 21A

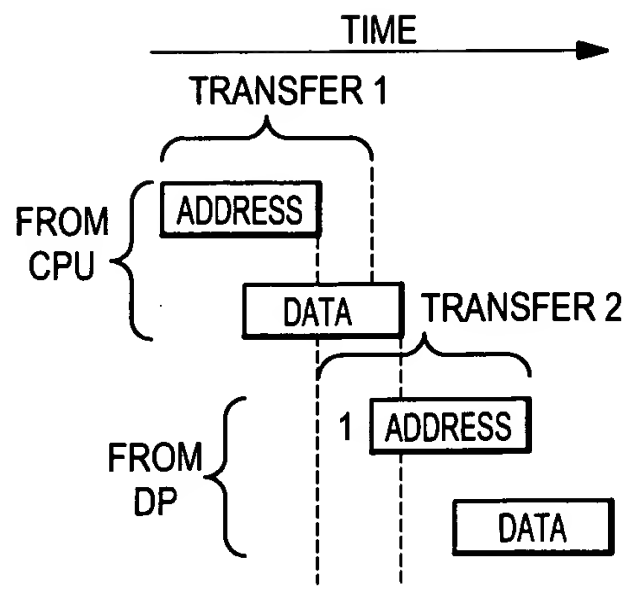


FIG. 21B

PATENT & TRADEMARK OFFICE
MAR 29 2005
OIPE
JC110

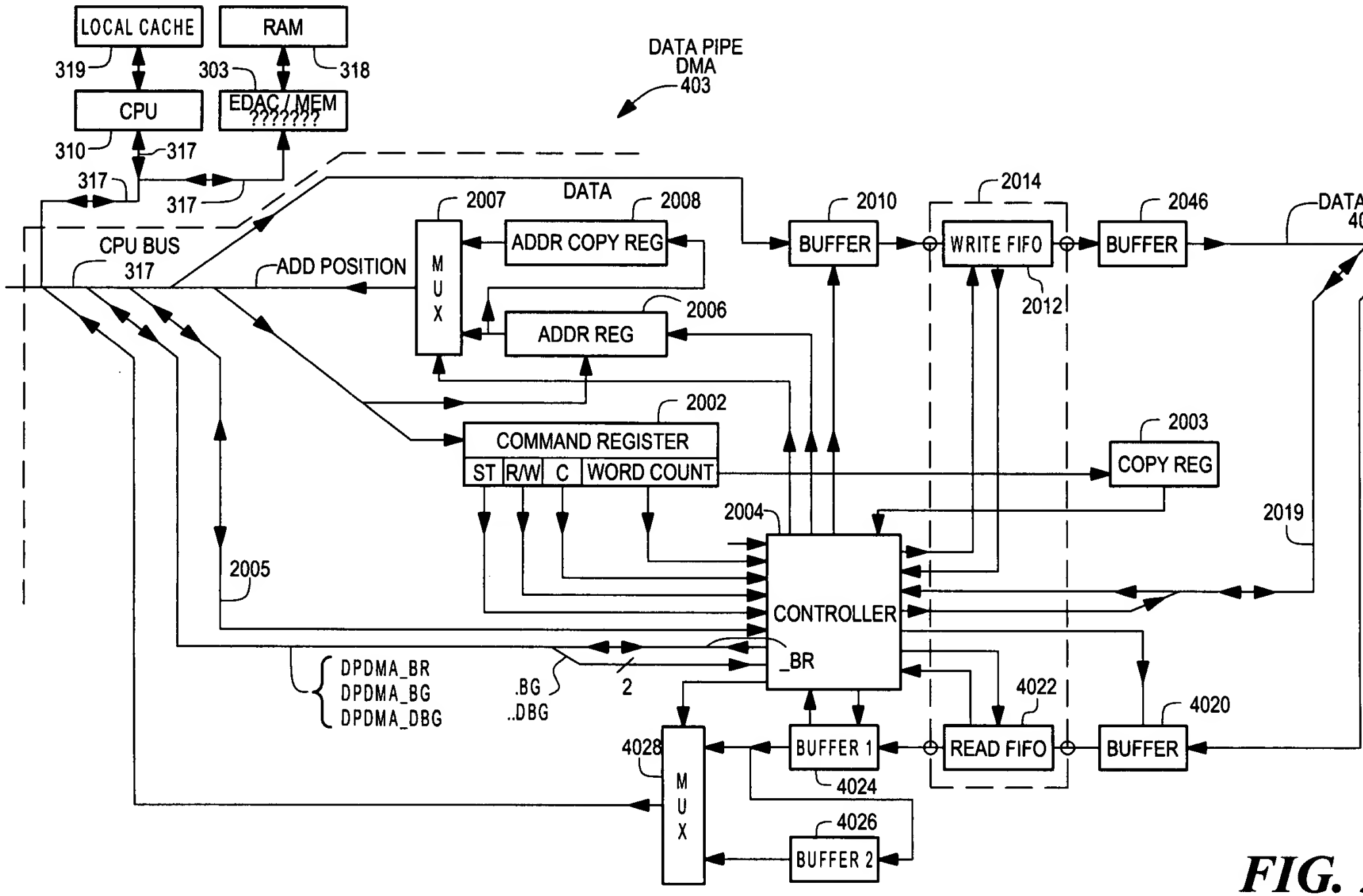


FIG. 22